

**FINAL DRAFT
FEDERAL FACILITY SI REVIEW
DOCUMENTATION PACKAGE**

**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
CALVERTON, NEW YORK**

PREPARED UNDER

**WORK ASSIGNMENT NO. 019-2JZZ
CONTRACT NO. 68-W9-0051**

SEPTEMBER 30, 1992

VOLUME 2 OF 4

**FINAL
SITE INVESTIGATION**

**NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT
CALVERTON, NEW YORK**

NORTHERN AND CHESAPEAKE DIVISIONS

VOLUME II

PREPARED BY

**HALLIBURTON NUS
ENVIRONMENTAL CORPORATION
PITTSBURGH, PENNSYLVANIA**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY
(CLEAN) PROGRAM**

**CONTRACT NUMBER N62472-90-D-1298
CONTRACT TASK ORDER NUMBER 0002**

APRIL 1992



**HALLIBURTON NUS
*Environmental Corporation***

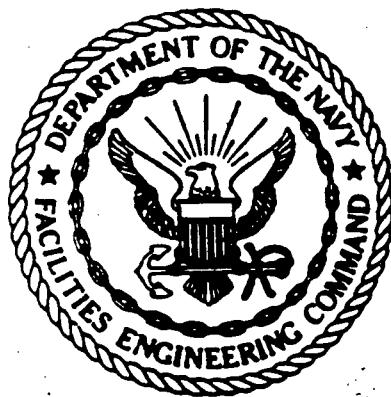
Donohue
ENGINEERS
ARCHITECTS
SCIENTISTS

ENSR™

APPENDIX A

**ENVIRONMENTAL/ENERGY SURVEY OF
NWIRP CALVERTON, NEW YORK**

DECEMBER 1976



NAVY ENVIRONMENTAL SUPPORT OFFICE
Naval Construction Battalion Center
Port Hueneme, California 93043

**ENVIRONMENTAL/ENERGY SURVEY OF
N W I R P
CALVERTON, NY**

**GRUMMAN AEROSPACE
CONTRACTOR-OPERATOR**

NESO 12-016.6



NOT FOR PUBLIC RELEASE

**ENVIRONMENTAL/ENERGY SURVEY
OF
GOVERNMENT-OWNED, CONTRACTOR-OPERATED (GOCO)
FACILITIES**

**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP)
OPERATED BY GRUMMAN AEROSPACE CORPORATION
ACTIVITY CODE NO. DOD 466
UIC NO. 96095
CALVERTON, NEW YORK**

3 DECEMBER 1976

Prepared for NESO by:

**ManTech of New Jersey Corporation
Systems Division
Systems Audits Department**

TABLE OF CONTENTS

	<u>PAGE</u>
SECTION I	
A. INTRODUCTION	1
B. AREA AND PLANT DESCRIPTION	2
C. FACILITY USE CONTRACT	5
D. PROBLEMS	6
APPENDIX A - ENVIRONMENTAL A-1	
1. ENVIRONMENTAL LAWS AND REGULATIONS	A-1
2. MAJOR FINDINGS	A-3
APPENDIX B - ENERGY B-1	
1. ENERGY PROFILE	
2. ORGANIZATION AND INITIATIVES	
3. ENERGY CONSERVATION PROJECTS	
4. RECOMMENDATIONS	
APPENDIX C - ENERGY/ENVIRONMENTAL CONFLICTS C-1	

LIST OF FIGURES

<u>FIGURE NO.</u>		<u>PAGE</u>
1	NWIRP SITE PLAN	3
B-1	FACILITY ENERGY PROFILE, WINTER DAY	B-3
B-2	FACILITY ENERGY PROFILE, SUMMER DAY	B-4
B-3	ENERGY CONSERVATION AT GRUMMAN AEROSPACE CORPORATION	B-11
B-4	UTILITIES CONSUMPTION - ELECTRICAL ENERGY	B-12
B-5	UTILITIES CONSUMPTION - FUEL OIL	B-13
B-6	UTILITIES CONSUMPTION - NATURAL GAS	B-14
B-7	GAC (GOCO PLANTS) TOTAL UTILITY CONSUMPTION	B-15
B-8	ANNUAL CALVERTON ELECTRIC ENERGY CONSUMPTION (MONTHLY PLOT)	B-17
B-9	PAINT FACILITY, SHOWING PROPOSED EXTENSION	B-25
B-10	BOILER BLOWDOWN PIPING SCHEMATIC	B-32
B-11	BOILER ARRANGEMENT SCHEMATIC	B-33

LIST OF TABLES

<u>TABLE NO.</u>		<u>PAGE</u>
A-1	APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS	A-2
B-1	ENERGY COST/CONSUMPTION	B-10
B-2	LONG TERM MAINTENANCE PLAN	B-26

Section I

A. INTRODUCTION

This report presents information on the status of compliance with current environmental legislation and the progress toward energy conservation achieved at the Naval Weapons Industrial Reserve Plant (NWIRP) operated by Grumman Aerospace Corporation. The survey was conducted in response to a request by the Navy Environmental Support Office (NESO) and Naval Facilities Engineering Command (Codes 102 and 104) to determine the environmental/energy conservation status of eleven of the GOCO facilities administered by the Naval Sea Systems Command, and nine of the GOCO facilities administered by the Naval Air Systems Command. The objectives of the environmental portion of the survey are to ascertain the present status of GOCO compliance with environmental laws and regulations, and provide a baseline from which to measure compliance in the future. The objectives of the energy conservation portion of the survey are to assess the present level of GOCO energy conservation, to determine areas amenable to further reduction in energy consumption, and to ascertain the availability of current and future energy sources.

The majority of information concerning the Grumman facility was obtained at the plant during a two-day site survey conducted by ManTech of New Jersey Corporation personnel on 17-18 November 1976. Mr. John G. Kresky, R.S. investigated environmental issues, and Mr. John W. Hamilton investigated areas of energy conservation.

Grumman and Naval personnel participating in the survey, conducting tours, and assembling plant records were as follows:

For the contractor:

Mr. Carl Petrowski (Assistant Manager, Maintenance Department)

Mr. R. Yezek (Deputy Director, Engineering Department)

Mr. Harold W. George (Chief Engineer, Facilities Department)

Mr. Peter L. Romano (Planning Manager, Facilities Engineering)

Mr. John Ohlmann (Manager, Environmental Control)

Mr. Mac McCown (Manager, Environmental Protection)

Mr. Leon Maggio (Manager, OSHA)

Mr. Robert Wheeler (Process Engineer)

For the Navy Plant Representative Office (NAVPRO):

Mr. T. Repetti (Property Administrator, Facilities Management)

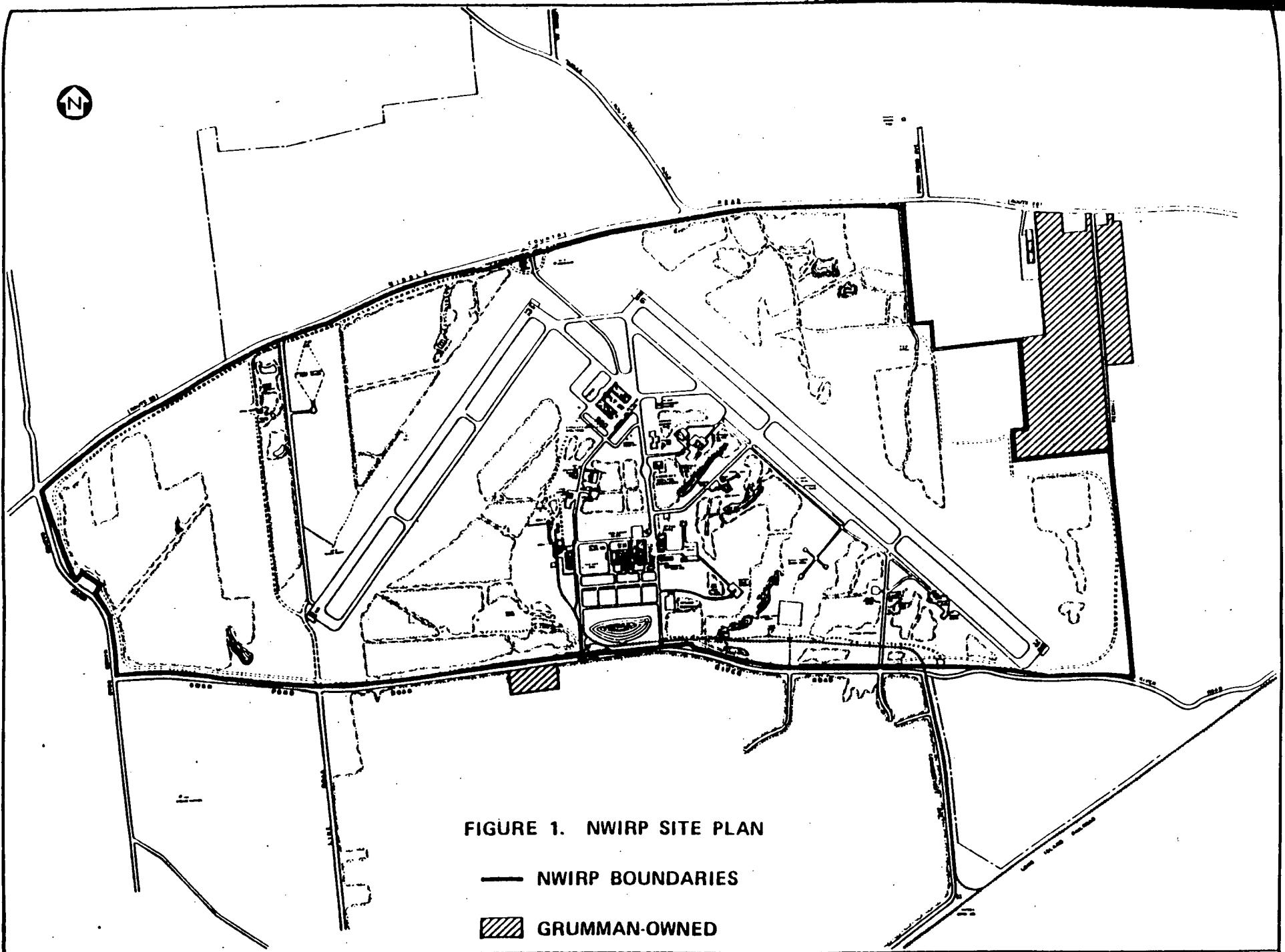
Mr. William Miller (Assistant Property Administrator, Facilities Management)

B. AREA AND PLANT DESCRIPTION

The NWIRP is located in Suffolk County, New York, at the eastern end of Long Island. The major portion of the NWIRP is located within the Town of Riverhead with the remainder in the Town of Brookhaven. The 2900 acre site is situated on relatively flat terrain that is sparsely developed (see Figure 1) at the present time although a number of housing developments are in the planning stage adjacent to the NWIRP. The surrounding area is farm and woodland. The entire site is GOCO. Facilities consist of two aircraft runways, two major assembly buildings, testing areas, an anechoic test chamber, and other smaller support buildings. The buildings, completed in 1954, appear to be structurally sound and well maintained. Facilities on the base are relatively spread out with large buffer areas between buildings.

The NWIRP conducts final assembly and testing, flight testing, refitting, and retrofitting of various military aircraft, including the F-14, A6A and Ea6B models. Heavy manufacturing is not done at the NWIRP. Most aircraft fabrication and primary assembly is conducted at the Grumman plant in nearby Bethpage, New York; then the parts are sent to the NWIRP, Calverton for final assembly and testing. The NWIRP presently employs 2600 people but this fluctuates with production needs.

The NWIRP is relatively well isolated with only very small areas of density housing located at the northwest and northeast sides of the site perimeter.





DEPARTMENT OF THE NAVY

NORTHERN DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

10 INDUSTRIAL HIGHWAY

MAIL STOP. #82

LESTER, PA 19113-2090

Helo -
Do we need this
for any more RFI
site assessment?
IN REPLY REFER TO

5090

Ser 2469/1821/JLC

MAY 01 1995

Bob
5/2

MEMORANDUM

*Mary
for you
not shred
Tilley
DRAFTED (RCRA)*

File

FOR THE MEMBERS OF THE TECHNICAL REVIEW COMMITTEE (TRC) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) CALVERTON, NEW YORK

Enclosed is the Navy's Draft RCRA Facility Investigation (RFI) for NWIRP Calverton, NY. Please review the document and forward any comments in writing on or before June 9, 1995.

The purpose of the RFI was to investigate four sites to determine the nature and extent of soil and groundwater contamination. The four sites investigated were Site 1 - Northeast Pond Disposal Area; Site 2 - Fire Training Area; Site 6A - Old Fuel Calibration Area and; Site 7 - Fuel Depot.

Please note that upon finalization of the RFI Report, only Volume I will be submitted. Therefore, you are asked to retain the draft versions of Volumes II through V as these will eventually become the final appendices to the RFI Report. If changes to the appendices are required, only those affected pages will be sent to you.

If you have any questions or would like additional information, please feel free to call me at (610) 595-0567, extension 163. If you would like to fax your comments, my fax number is (610) 595-0555.

Thank you for your continued interest and participation in NWIRP Calverton's IR program.

Sincerely,

JAMES L. COLTER
Remedial Project Manager
by direction of the Commanding Officer

Distribution:

DLA/DPRO, Abe Kern (2 copies)
Grumman Aerospace Corporation, John Ohlmann
Geraghty and Miller, Carlo San Giovanni
Suffolk County Department of Health, James Pim (2 copies)
Naval Air Systems Command, Robert Booth (2 copies)
NYSDEC, Jeff McCullough (3 copies)
NYS Department of Health, Tim Vickerson
EPA Region II, Carol Stein (2 copies)
EPA Region II, Mary Logan (2 copies)
The Nature Conservancy, Marilyn Jordan
The Nature Conservancy, Stuart Lowrie
Town of Riverhead, Andrea Lohneiss
National Response Corporation, Mark Miller

C. FACILITY USE CONTRACT

Grumman, Calverton has facility use contract number N0019-69-L-9057. The contract series expiring on 31 March 1984, consists of three five-year contracts originally negotiated in 1969. The contract periods run sequentially for a total of 15 years before renegotiation. The second five-year period of the lease expires 31 March 1979. GAC is expected to exercise the option to renew the lease for the third five-year period which will expire 31 March 1984. The points of contact within the Naval Air Systems Command (NAVAIR), the major claimant, are as follows:

1. For contractual matters - Mr. John Desloge

Code AIR-21533D

Naval Air Systems Command

Department of the Navy

Washington, D.C. 20361

202-692-7560.

2. For facilities matters - Mr. Larry DeAtley

Naval Weapons Engineering Support Activity

Building 220

Code ESA 208

Washington Navy Yard

Washington, D.C. 20374

202-433-3340

The contract does not specify which party is responsible for obtaining and insuring compliance with pollution-related permits (NPDES, etc.). The methods for ascertaining and funding both energy conservation and environmental protection needs are twofold. First, the contract stipulates that approved long-term maintenance projects and environmental quality control projects are to be funded by Grumman in lieu of rent payments. Second, any requirement for project-funding in excess of rental fees normally assessed Grumman would be submitted to NAVAIR in an annual capital maintenance or facilities acquisition program proposal.

NOTE: NAVWESA comments dated 28 December 1976 in letter ESA-6511 state that: Lease N00019-69-L-9057 authorizes use of the NWIRP on a rent-free basis in performance of work for the government but does require the payment of rent for performance of commercial work. As consideration for use of the NWIRP during the second five-year period, Grumman is obligated to an average annual expenditure of \$1,300,000 for long-term maintenance. Grumman may spend more than this amount. NAVAIR has no funding responsibility for any long-term maintenance; Capital maintenance is not mentioned in the lease.

D. PROBLEMS

Survey of the NWIRP indicated a clean, well-maintained facility. In the light of pollution control and energy conservation achievement goals, several potential and existing problem areas have been identified. It should be noted that these problems were identified primarily on the basis of a brief visual inspection, and that energy related issues need further economic analysis to determine their merit on the basis of cost benefit.

Environmental:

1. Determine the feasibility of installing automatic switching devices on the emergency electrical supply for wells. This also should be considered for wells constructed in the future.
2. Determine the feasibility of dewatering sludge from the on-site wastewater treatment plant before removal to Grumman, Bethpage.
3. Determine the feasibility of oil/water separation of storm water discharge to McKay Lake.
4. Determine feasibility of installing both an impervious, diked surface and controls to eliminate potential contaminated runoff due to fuel spills at the outdoor fuel calibration facility.
5. Provide more efficient air pollution controls at paint facilities - either by redesigning or replacing the existing facilities.
6. Determine the feasibility of installing spill containment devices around the transformers filled with PCB-based coolant.
7. Determine the feasibility of writing an Oil Spill Prevention Control and Countermeasures (SPCC) Plan.
8. Provide industrial wastewater treatment to eliminate hauling of industrial wastes to Bethpage.

Energy:

1. Paint facility extension
2. Warehouse S-7 lighting reduction
3. Hangar lighting reduction in summer
4. Reduction of lighting in receiving areas
5. Oil storage
6. Heat exchange opportunities - boilers, boiler blowdown, compressor cooling water, incinerator
7. Energy usage contingency plan - formal documentation

APPENDIX A
ENVIRONMENTAL

I. ENVIRONMENTAL LAWS AND REGULATIONS

Executive Order 11752 identifies specific federal laws applicable to environmental pollution control. The federal laws cited in this order, as well as other pertinent federal laws, are listed in Table A-1. The Executive order identified those control subjects in these laws which are pertinent to GOCO activities. It also specifies the subsequent levels of regulations which are relevant. Compliance with all applicable federal regulations is required.

For the laws not listed in the Executive order, the control subjects and level of regulation identified in Table A-1 are derived from current information available to NESO.

Federal, state, and local regulatory agencies have translated the requirements of the federal laws into a large number of regulations. In most cases, these regulations are site-specific; that is, the regulations applicable to a given GOCO will depend on the location, types of sources and processes, and the kinds of pollution generated. The wide variety of total regulations applicable to the GOCO activities is not amenable to a short summary.

The National Environmental Policy Act (NEPA), an overriding law relating to all future actions which may have environmental significance, is implicitly understood to be applicable to each of the environmental/pollution categories discussed in this report.

Regulation Sources:

Federal regulations are cited in a standard format which refers to the Code of Federal Regulations (CFR). The first number refers to a Title. Most of the federal regulations applicable to the GOCO are under Title 40, Protection of the Environment. The second number designates the section within the Title in which the specific regulation is found. All proposed and adopted regulations and subsequent changes are published daily in the Federal Register by the National Archives and Records Service of the General Services Administration.

TABLE A-1
Applicable Environmental Laws and Regulations

<u>Acronym</u>	<u>Public Law</u>	<u>Title</u>	<u>Control Subject</u>	<u>Applicable Regulations</u>
FWPCA	PL92-500	Federal Water Pollution Control Act	Effluent limits, Water quality standards, Discharges to sewers	Federal, State, Local
SDWA	PL93-523	Safe Drinking Water Act	Potable water treatment and distribution	Federal, State
CAA	PL91-604	Clean Air Act	Air emission limits, Air quality standards	Federal, State, Local
MPRSA	PL92-532	Marine Protection Research and Sanctuaries Act	Ocean dumping	Federal only
RHA	N/A	Rivers and Harbors Act	Dredge permits	Federal only
SWDA	PL89-272	Solid Waste Disposal Act	Recovery, collection, storage, separation, disposal of solid wastes	Federal only
RRA	PL91-512	Resource Recovery Act	Recovery, collection, storage, separation, disposal of solid wastes	Federal, State
NCA	PL92-574	Noise Control Act	Noise emission standards	Federal only
FEPCA	PL92-516	Federal Environmental Pesticides Control Act	Manufacture, transportation, purchase, use, storage, disposal	Federal
NEPA	PL91-190	National Environmental Policy Act	Planning	Federal
CZMA	PL92-583	Coastal Zone Management Act	Planning	Federal, State

Most Stringent Requirements:

Since a GOCO activity is required to comply with substantive standards set by different levels of authority, it is assumed that compliance with the most stringent regulation will satisfy the needs of all authorities. Therefore, this status report identifies only the most stringent applicable regulation.

2. MAJOR FINDINGS

a. WATER QUALITY

Water quality at the NWIRP facility involves potable and process water, and industrial and sanitary wastewater.

The principal applicable law is the Federal Water Pollution Control Act of 1972 (FWPCA). The Safe Drinking Water Act (SDWA) has limited application. Wastewaters discharged directly to surface waterways must be under permit as issued by EPA and monitored in accordance with the National Pollutant Discharge Elimination System (NPDES) as authorized under Section 402 of the FWPCA. Wastewaters discharged to municipal treatment systems must comply with the limits, prohibitions, and pretreatment requirements established by the local ordinances.

Point source discharges to municipal treatment plants are exempt from NPDES permits; however, the FWPCA prohibits the discharge of pollutants that cannot be effectively removed at the treatment plant.

1. Potable/Process Water

All potable, process and fire protection water used by the NWIRP is supplied by three 12 inch diameter, 145 feet deep wells, located on site, northeast of the steam plant. The wells have a 1000 gallon per minute (gpm) pumping capacity and 75 horsepower motors for driving the submersible pumps. Presently, only one well has emergency power, and the switchover to that system is accomplished manually. Due to the distance between the wells and the work place (i.e., the sewage treatment plant) of the person responsible for the water supply, it is recommended that automatic switching devices be installed on existing wells and wells to be constructed in the future. In an emergency, automatic controls would ensure the continued pumping of water without interruption of service.

The wells are more than adequately isolated and of approved construction. A project (#CF 9096-059-187), with estimated completion by 1977, is presently underway to eliminate cross connections between water and process lines.

With the exception of water used for boilers, raw incoming water is not treated. Boiler feed water is treated by automatic feed with proprietary chemicals obtained from the Dearborn Chemical Company, Ridgewood, New Jersey. Although the additive are coded, it is believed to be an acid-caustic treatment process.

Air conditioning units presently consume the largest amount of water. Water storage facilities are as follows:

One, 50,000 gallon domestic reserve plus one 100,000 gallon fire reserve in an overhead tank. This tank is regulated by automatic pump controls located at two foot height intervals. The designed head is 150 feet.

Two, 350,000 gallon fire reserve tanks each located on the ground and filled by manual control.

Presently there are no significant problems with the quality or quantity of water supplied to the NWIRP. Future projects proposed to date are associated with the replacement of one of the wells.

2. Wastewater

The NWIRP has four methods for disposal of wastewater generated at this facility. All industrial wastewater from stripping processes, paint spraying facilities and other small activities is transferred to the Grumman Aerospace Corporation (GAC), Bethpage industrial wastewater treatment plant via GAC tank trucks. The major constituent of the waste is rinse water from cleaning, stripping and brush Alodine operations and small quantities of water containing epoxy, polyurethane and paint deflocculants from paint spraying facilities.

At GAC Calverton, an extended aeration activated sludge facility with a capacity of 0.062 million gallons per day (MGD) receives all sanitary wastes with the exception of wastes generated at the few auxiliary buildings that are served by septic tanks. The activated sludge system is operated under permit #NY 0025453 and has an average flow of 0.0229 MGD and a biochemical oxygen demand (BOD) of 49.7 pounds per day influent and 3.5 pounds per day effluent. Raw, underwatered sludge from this system is removed to GAC Bethpage by GAC trucks. It is recommended that the feasibility of dewatering the

sludge before removal to Bethpage be determined due to the economical inefficiency of hauling un-dewatered sludge. The volume of sludge transported can be lowered by 30-50 percent with efficient dewatering. This also would relieve the Bethpage facility of having to dewater sludge from the NWIRP.

Various outbuildings such as flight buildings, storage and test buildings are equipped with septic tanks. The systems are in sandy, well drained soil and are functioning normally.

On 31 May 1974, the Environmental Protection Agency (EPA) issued GAC an NPDES permit for the treated discharge from the NWIRP extended aeration wastewater treatment plant (WWTP). The permit has the following specifications:

Permit #NY 0025453

Issued by Permits Administration Branch, EPA Region II

Receiving Waters - Peconic River

Permit expiration - 31 May 1979

The discharge limitations are as follows:

<u>Discharge Load Allocations</u>	<u>BOD₅</u>	<u>Suspended Solids</u>
30 day average		
lb/day	15	15
kg/day	6.8	6.8
7 day average		
lb/day	23.3	23.3
kg/day	10.6	10.6
<u>Discharge Concentrations</u>		
30 day average (mg/L)	30	30
7 day average (mg/L)	45	45
Minimum % Removal	85%	85%

total flow - 0.062 million gallons per day

fecal coliform bacteria - not more than 200 bacteria per 100 milliliters

geometric mean value in 30 consecutive days and not more than

400 bacteria per 100 milliliters geometric mean value in 7 consecutive days

pH - 6.0-9.0

Floating solids or visible foam - none allowed

The monitoring requirements are as follows:

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Minimum Monitoring Requirements^{1/}</u>	<u>Sample Type</u>
Total Flow, mgd ^{2/}	Daily		Instantaneous
BOD ₅ , mg/l	4/yr		Grab
BOD ₅ , lbs/day	4/yr		Grab
Settleable Solids, ml/l	Daily		Grab
Suspended Solids, mg/l	4/yr		Grab
Suspended Solids, lbs/day	4/yr		Grab
Residual Chlorine, mg/l ^{2/}	Daily		Grab
Fecal Coliform, N per 100 ml ^{2/}	4/yr		Grab
pH	Daily		Grab

1/ Except where indicated, influent and effluent measurement and testing are required

2/ Only effluent testing required

According to the specifications of the permit, the permit expires on 31 May 1979. At least 180 days prior to the expiration date, appropriate forms will have to be filed and fees paid to request a renewal of the permit.

The NWIRP is beginning a project of constructing a temporary prototype industrial wastewater treatment plant to provide the parameters for disposal of paint shop wastes and thereby alleviate the problem of hauling wastes to Bethpage. This plant is still in preliminary planning stages, but contact with the United States Environmental Protection Agency Region II has expedited a modification to the existing permit (NY 0025453) in a letter dated 9 November 1976. This letter details parameters to be followed which includes:

a. Limitations on concentration of wastes prior to mixing with sanitary wastewater

	<u>30 day Average (mg/L)</u>	<u>1 day Maximum (mg/L)</u>
Hexavalent Chromium	0.05	0.1
Chromium Total	0.5	1.0
Flouride	10.0	20.0
Iron	1.0	2.0
Cyanide	0.5	1.0
Phenols	5.0	10.0
BOD		
Suspended Solids		

Monitored without limitation
Monitored without limitation

GAC plans to utilize a process that will effectively destroy phenols by oxidation, reduce chromium, and precipitate heavy metals to meet allowable limits. Because effective treatment of the metals is not anticipated by the sanitary system, these pretreatment values are the final limitations.

A two-stage monitoring analysis must be initiated in order to avoid the 7:1 dilution ratio experienced by combining the industrial and sanitary wastes. The metal concentrations must be monitored before dilution in order to achieve adequate concentration removals.

In addition to the present NPDES effluent parameter limitations, the following parameters must also be monitored:

	<u>30 day Average</u> (mg/l)	<u>1 day Maximum</u> (mg/l)
Phenols	0.5	1.0
Methylene Blue		
Active Substances	5.0	10.0
Phosphates	5.0	10.0
pH (STD Units)	6.0 (min)	9.0 (max)
BOD (as previously limited)	30.0	45.0
Suspended Solid (as previously limited)	30.0	45.0
COD	Monitored without limitation	
Total Dissolved Solids	Monitored without limitation	
Settleable Solids (as previously limited)	Monitored without limitation	

Finally, all additional parameters will be sampled on the quarterly cycle, as previously required. The daily parameters (Flow, pH, Settleable Solids, Temperature and Residual Chlorine) will remain on the same cycle.

The trial plant will be located east of plant #6 in an area used many years ago for a sewage treatment plant which is presently inactive. A 32 ft. by 50 ft. concrete slab with roof will house four Gatch treatment tanks with associated pumps and piping. Industrial waste will be trucked to the trial facility for pretreatment and discharged into the existing central sewage treatment facility. Any processing of wastes through the initial stages of the prototype process that does not meet the above standards will be hauled as before to the Bethpage facility until the process has been perfected and finalized. Since most of the heavily polluted industrial wastewaters generated in the Grumman aircraft manufacturing process occurs at Bethpage, this waste will not be extremely concentrated.

The NWIRP storm water system discharges non-contact cooling water and storm water through a ditch and culvert system to McKay Lake which in turn empties into Peconic River. The storm system also picks up drainage from many concrete and asphalt paved areas where oil spills could occur. It is recommended that the feasibility be determined of installing an oil/water separator at the discharge point in order to prevent such spilled contaminants from being washed into the lake.

It is calculated that one million gallons of water per day are used for once-through cooling. The NWIRP is presently in the process of upgrading these systems by eliminating once-through cooling wherever feasible. Although this water does not pass through the sewerage system, there are definite

thermal qualities that may be transmitted to McKay Lake. These thermal properties are not presently causing visible signs of eutrophication in the lake, but will aid in speeding the eutrophication process if left uncontrolled. The reduction of once-through cooling will also reduce the demand for fresh water intake which will result in ground water conservation.

The outdoor fuel calibration and fuel removal facilities are involved with the storage and transfer of aircraft fuels. Presently these facilities are located in an area where the ground is subject to seepage and storm runoff into a natural drain. It is recommended that the feasibility be determined of constructing a diked, impervious service for this operation in order to protect the surface waters from contamination.

Beyond the problems discussed, the NWIRP appears to have no other water quality or wastewater problems.

b. AIR QUALITY

The Clean Air Act Amendments of 1970 (PL 91-604) and subsequent amendments are the principal federal law having an impact on air quality at NWIRP. Under this legislation, the country is divided into air quality control regions (AQCR). Each state then has the primary responsibility for assuring air quality within its borders and must submit an implementation plan specifying how the national primary and secondary ambient air quality standards will be maintained within each AQCR.

The NWIRP is under the jurisdiction of the New York State Department of Environmental Conservation. New York has various regulations limiting the types and amounts of pollutants that can be discharged into the air. The two most notable pollutants are particulates and oxides of sulfur. The need for air pollution control devices will depend upon the type and amount of a pollutant produced and the capacity or size of the source.

The State has various regulations limiting the types and amounts of pollutants that can be discharged to the air. Regulations are classified into three sections pertaining to process sources (such as industries), boilers and incinerators. The allowable pollutant loading from any source is based on several factors, including the nature and quantity of the pollutant, the

geographical location, the ambient air quality, and the applicable National and State ambient air quality regulations. The State reviews each source in the light of these factors and issues the required "certificate to operate" which stipulates the type of pollution controls needed and the pollutant loading limitations. Every three years dischargers must submit a certificate renewal application listing changes to the emission sources. The State Air Pollution Control Office reviews the permit applications and uses the information to determine the need for pollution control devices.

The NWIRP has no air pollution control devices on boiler stacks. The emission is tightly regulated by the strict use of low sulfur #6 oil. This widely used method not only has been economically feasible in the past, but also has satisfied the requirements of the State. It should be noted that any change in fuel and/or sulfur content of fuel must be cleared through the State and may result in the requirement of sulfur oxide removal devices.

The following is a list of exhausts and air pollution control devices for which the NWIRP has operation certificates:

<u>Number of Exhausts</u>	<u>Source</u>	<u>Pollution Controls</u>
3	Paint Spray	Spray Towers
1	Exhaust Paint Room	None
2	Wood, Masonite, Micarta, Plastics	Cyclonic separator
3	#6 oil-fired boilers	None
1	Incinerator	Venturi scrubber

Note that all the facility exhaust stacks have certificates. These certificates specify the allowable pollutant loading for each exhaust. Personnel indicated that to date the facility is in compliance with the limitations of all the certificates.

The NWIRP is located in an area that is closely surveyed by air pollution control authorities. Of all the environmental regulations that impact the NWIRP, air quality may be the most highly controlled, mainly due to its proximity to New York City.

Problems:

The paint spraying facilities, although marginally meeting air pollution requirements, are in poor repair and have suffered from many mechanical and energy-related problems. Due to the increased surveillance that can be expected in the future in the field of air quality monitoring and the aforementioned conditions, it is recommended that consideration be given to upgrading or replacing the present facilities.

Outdoor tests are conducted at the NWIRP and are limited primarily to jet engine runup testing and some aircraft overflights. These test facilities are not equipped with air pollution controls. Two problems are encountered in attempting to control these exhaust emissions. First, "state-of-the-art" in air pollution control has not advanced to the point of providing feasible controls for such test facilities, and second, the military is quite reluctant to allow fuel additives for controlling emissions, particularly when the fuel is used for test procedures. Presently, this pollution problem is not serious, primarily because of the remote location of the NWIRP. When the surrounding area becomes more developed, this situation may change.

There are no other known problems with air quality at the NWIRP and there are no other planned projects.

c. SOLID WASTE

The Solid-Waste Disposal Act (SWDA) is the federal law governing solid-waste disposal on land and resource recovery. Federal regulations on disposal methods have also been promulgated. Under the Resource Recovery Act of 1970, solid waste management and resource recovery systems are to preserve and enhance the quality of air, water, and land resources.

Solid waste generated at the NWIRP consists primarily of general office trash, some wood (from crates, skids, etc.) and a very small amount of metal scrap. Personnel could not provide data indicating the amounts of waste produced; however, there are no manufacturing processes to generate large volumes of waste.

All solid waste, with the exception of classified material, is taken to the Riverhead Municipal Landfill by Jackson Trucking of Huntington Station, Long

Island. Jackson Trucking is licensed by both the State and by Suffolk County. The NWIRP does not have a program for separating wastes for reclamation and recycling.

With the exception of classified waste destruction, there is no other on-site disposal of solid wastes. Classified material is destroyed as needed at the NWIRP incinerator. As previously indicated, this facility has a Venturi Scrubber to control emissions.

The present dumpster-compactor system has presented no known environmental problems. There are no planned projects for improvements or changes to the present collection and disposal system.

d. NOISE

The Noise Control Act of 1972 (PL 92-574) directs federal agencies to execute programs for abating noise which jeopardizes health and welfare. Any federal agency engaged in activities resulting in noise emission must comply with Federal, state, interstate, and local requirements respecting control and abatement of environmental noise.

Environmental noise problems are encountered at the NWIRP primarily because of the outdoor flight testing of aircraft and the static testing of aircraft engines. Engine testing is done in an area that provides natural isolation from other operations and the public. The area encompassing the line of engine blast from the testing facilities to the facility property line is heavily wooded, thereby providing extensive natural protection.

On the other hand, flight testing is conducted from the two NWIRP runways (10,000 and 7,000 feet in length) but goes beyond the boundaries of the facility to impact area residents. As a result of previous complaints, the plant has stopped night flying except in rare cases where it is mandatory. Flight paths have been studied and where possible adjusted to minimize impacts on the area residents. R. Dixon Speas Associates, Inc. conducted an Air Installation Compatible Use Zone Study, published in December, 1975. They summarized the problem and proposed remedial actions, centering on the fact that isolation was the best means of noise control. The report suggested that such isolation be accomplished both through cooperation with local government officials to retard the future population growth of the surrounding area, and

through maintenance of a good rapport with affected residents. It should be noted that this is the most recent in a number of noise studies to determine methods of noise control and impact reduction. Most studies approach the situation from a sociological standpoint rather than a technological standpoint, understanding that "state-of-the-art" has not advanced to the point of feasibly reducing noise levels from high performance military aircraft in flight. GAC has also submitted a proposal for construction of a "hush-house". This is a mechanical device to reduce atmospheric noise levels during outdoor testing.

There are no other known significant noise problems associated with the NWIRP.

e. HAZARDOUS MATERIALS

The FWPCA of 1972 addresses the pollution of waters by hazardous substances. This law provides for the establishment of effluent, prohibition and pre-treatment standards to which source operators must conform. This law also provides for standards governing the level of pollutants allowed to be discharged to municipal treatment works. Hazardous substance and oil spill prevention and accidental oil spill reporting and cleanup regulations also exist under the FWPCA. Hazardous emissions to the atmosphere are regulated under the Clean Air Act.

Numerous hazardous materials including methylethyl ketone (MEK), paints, phenolics, and degreasers such as Ridolene 53 and Alodine, are routinely used at the NWIRP. As needed, these materials are transported in the metal drums and plastic carboys from GAC Bethpage, via GAC-owned trucks, to the NWIRP. At Calverton, some materials are stored in a small unprotected outdoor area while others are stored as needed at an indoor location that affords protection from the elements. A building located between the two paint shops is utilized for the storage of paints and solvents. This area is well protected and ventilated. It also has proper static grounding facilities as needed and no floor drains.

There is no disposal of hazardous materials at the NWIRP. Spent chemicals are captured in sumps and removed in barrels or by bulk transportation to GAC Bethpage and either treated, taken to New Jersey for disposal, or cleaned and/or regenerated.

There is no spill prevention control and countermeasures (SPCC) plan at the NWIRP. It is recommended that the feasibility of writing such a plan be

determined in light of future expectations concerning increased agency activity in this area.

The NWIRP maintains ten electrical transformers that contain highly toxic polychlorinated biphenyl (PCB)-based compounds as the coolant. The location, type of transformer, and estimated amount of coolant in these units are as follows:

Number of Transformers	Manufacturer of unit	Location of Unit	Estimated Quantity (gallons) in each Transformer	PCB Trade name
4	Niagara	N.E. Corner of Plant #7	172	Askarel
1	Westinghouse	Electrical Equip. Room, Plant #7	93	Inerteen
1	Westinghouse	Power Center, Bldg. #6	400	Inerteen
1	Westinghouse	Fuel Calibration Facility	128	Inerteen
1	Westinghouse	Old Trust Stand Area	126	Inerteen
1	Westinghouse	Engine Test House	274	Inerteen
1	General Elec.	Anechoic Test Chamber	320	Pyranol

Most of these transformers are situated on concrete pads surrounded by gravel and have no spill containment structures.

It is recommended that a determination be made for providing spill containment devices such as diking and impermeable surfaces, for all these transformers having PCB-based coolants in order to eliminate potential contamination of surface waters and area resources.

The NWIRP presently conducts approximately six fire fighting training exercises per year at a site with a diked, concrete pad. The final procedure in this exercise is to completely burn off any excess fuel. Jet gas, paint solvents, oils, gasoline and greases are included in the choice of fuels for

the particular sessions. Prior to conducting a session, personnel are required to obtain permits from the air pollution control agency and the fire department.

With the exception of the problems indicated, there appear to be no other problems with, or planned changes to, the hazardous materials handling and disposal system.

f. PESTICIDES

The Federal Environmental Pesticides Control Act of 1972 (PL 92-516), which includes the Federal Insecticide, Fungicide, and Rodenticide Act, provides for the control of pollution by pesticides. Authority for regulation of pesticide storage and disposal is established under this law. Open dumping and burning and disposal into water and deep wells is prohibited. Certification of applicators is also established.

Pesticides and herbicides are not stored at the NWIRP nor used on-site by plant personnel. Harder Extermination Service, a private, licensed, pest control operation, provides termite and rodent control on a contractual basis.

g. NON-IONIZING ELECTROMAGNETIC RADIATION AND IONIZING RADIATION

The Nuclear Regulatory Commission (NRC) (formerly the Atomic Energy Commission) and the EPA direct policy for protecting the environment from radioactive materials. Regulations pursuant to the federal Occupational Safety and Health Act (OSHA) establish exposure limits for health and safety from radiation.

Radar facilities for the tracking of test aircraft are maintained at the NWIRP. The necessary Federal Communications Commission (FCC) frequency permits and registrations are on file. Radar units on aircraft are tested periodically. The procedure used to protect the surrounding area is to maintain sufficient isolation and use dummy loads.

The facility also operates an anechoic test chamber for complete radiation testing of all avionics contained in production, test, and prototype aircraft. Stringent requirements are met at this unique testing facility to eliminate

external radiation and ensure complete protection from internal radiation leakages. Protection is accomplished through the use of a hermetically sealed chamber of sufficient size to house and suspend the entire aircraft for testing purposes.

Presently there are no known problems with these radar facilities and no planned alterations.

h. OIL SPILLS

Preventive regulations under the Federal Water Pollution Control Act of 1972 (PL 92-500) have been established to significantly reduce the incidence of oil discharges. Intentional discharges of oil or oily wastewater are prohibited by the FWPCA. Nontransportation-related regulations are principally applicable to the storage of fuel that could reasonably be expected to enter a waterway if accidentally spilled. A significant requirement under current legislation is the preparation and implementation of a Spill Prevention Control and Countermeasures (SPCC) Plan.

Oil and various fuels are stored at several locations throughout the NWIRP. The major facilities are as follows:

Number of Tanks	Capacity of Each Tank (gallons)	Contents	Location
1	250,000	#6 Fuel Oil	Above Ground - (diked) Central Steam Plant
2	50,000	JP-4/JP-5	Underground - Fuel Storage Area
6	15,000	Aircraft Fuels	Underground - Fuel Storage Area
1	5,000	Gasoline	Underground - Fuel Storage Area
7	275	Diesel	Above Ground (undiked) with emergency generators

Absorbant materials are on hand to clean up spilled oil and fuels, but there are no documented formal procedures or assigned responsible personnel for handling spills.

The NWIRP does not have a Spill Prevention Control and Countermeasures (SPCC) Plan. It is recommended that provisions be made for writing an SPCC plan to document both the fuel tank inventory and the necessary procedures for handling a spill.

To date there are no records of significant oil or fuel spills.

i. ALL-MEDIA TRAINING

Most of the legislation cited in the preceding sections has either a direct or implied requirement for the training of personnel in environmental control. The FWPCA requires waste treatment plants to provide a minimum of secondary treatment. The SDWA establishes potable water treatment requirements. Resources recycling and recovery, plus oil spill cleanup and prevention all require new or special equipment and procedures. Toxic and hazardous substances also require special handling. Pesticide applicators must be certified. In all cases, operators must be trained to properly handle routine work and emergencies.

Presently, the NWIRP has established formal training for plant personnel. New personnel are instructed in the use of chemicals and other materials by supervisors or more experienced personnel.

j. REGULATORY AGENCIES

The following Federal, State and Local agencies impact the NWIRP:

1. Suffolk County Department of Environmental Control
1324 Motor Parkway
Hauppauge, New York 11787
2. Suffolk County Department of Health
Suffolk County Center
Riverhead, New York 11901

3. State of New York
Department of Environmental Conservation
Region I
New York S/EC Building #40
SUNY
Stony Brook, New York 11790
4. State of New York
Department of Environmental Conservation
50 Woff Road
Albany, New York 12233
5. U. S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10007

k. POLLUTION CONTROL/ABATEMENT PROJECTS

GAC, through the NAVPRO, submits proposals annually to NAVAIR for approval and funding of necessary pollution control projects. Proposals through LY 1976 and an eight year Long Term Maintenance Program for LY 1976-78 have been submitted. Some of these proposals include environmentally related projects. Refer to LTM LY 1976-83 for environmental projects, line items 20, 26, 31, 32, 34, 41 and 44.

APPENDIX B

**SELECTED GRUMMAN FACILITY ENGINEERING
SPILL RECORDS**

1982-1985

Memo

Action Information Only Reply Requested

Date 9/7/82
No. FDP-1378

From: J. Ohlmann

B08/30

296

GAC

Name

Mail Station - Pk - Group No. - Company

Extension

To: File

Name

Mail Station - Pk - Group No. - Company

Extension

Subject: WASTE FUEL SPILL AT FIRE TRAINING FACILITY, CALVERTON, 8/24/82

Reported subject spill at 1:10 P.M. on 8/24/82 to the N. Y. S. Dept. of Transportation (NYSDOT) in Albany (516-457-7362), as required.

- o Description of facility and action taken - Given to NYSDOT.
 - 6,000 gallon holding tank piped to various diked areas for fire simulation and fire fighting.
 - Valve found open and 1,000 - 3,000 gallons spilled.
 - GAC cleaning up liquid now.
 - We will contact Marine Pollution Control for clean-up assistance.
- o Given Spill No. 820923 by NYSDOT.
- o Also reported spill to John Scherrer of NYSDOT in the Hauppauge office.

Note: N.Y.D. Dept. of Environmental Conservation (NYSDEC) and Suffolk County Dept. of Health Services (SCDHS) contacted by NYSDOT.

- o Notified Bill Miller of Navy regarding spill.
- o 3:00 P.M.:
 - Arrived at the spill site.
 - Marine Pollution Control on the job, sucking up liquid.
 - John Scherrer (NYSDOT) and Jim Whitney (SCDHS) also at the site.
- o Two contaminated dirt samples taken for GAC lab analysis. Test results required for NYSDEC and Brookhaven Landfill.
- o Approximately 1,500 gallons of liquid removed by Marine Pollution Control.
- o Valve locked - Future fire training put "on hold" for future facility upgrade.

8/25/82:

- o Authorities/Marine Pollution Control agree to hold off clean up today because of rain.
- o Parameters for leachate analysis given by phone by Walter Parish, NYSDEC.

cc: T. Cunniffe

B. Yezek

G116B REV 3
11-81

Page 1 of 3



MEMORANDUM

CHECK (✓) BOXES
AS APPROPRIATE

FROM: J. Ohlmann

Facil. Engg.

B08/30 GAC

DATE February 23, 1982

NAME

GROUP NO. & NAME

MAIL STA. - PLT. NO. - COMPANY - EXT.

TO:

File

NO.

FDP-1243

SUBJECT:

FUEL SPILL ON THE GROUND AT THE ENGINE TEST HOUSE
FACILITY, CALVERTON, ON 2/9/82

While testing a engine, a cross-over valve was inadvertently left open and JP4 was returned to the JP5 tank, which overflowed through the vent line.

The spill was vacuumed up by GAC personnel and "Speedy-Dry" was applied as an absorbent.

On 2/10/82, the spill of 100 - 200 gallons was reported to the N. Y. S. Dept. of Transportation (NYSDOT) in Albany and number 811-655 was assigned. NYSDOT in Hauppauge (John Scherer) and Suffolk County Dept. of Health Services (SCDHS) (Jim Pim) was also notified. It should be noted that N. Y. S. Dept. of Environmental Conservation is automatically informed of spills by NYSDOT (Albany).

On 2/11/82, SCDHS (James Whitney) inspected fuel spill and recommended clean-up of soil by Marine Pollution Control as planned.

On 2/12/82, Marine Pollution Control was retained for clean-up of soil. NYSDOT (Bill Norvac) inspected and supervised clean-up.

On 2/13/82, contaminated soil was trucked to Brookhaven landfill.

On 2/16/82, NYSDOT (Bill Norvac) made final inspection and closed out job.

JO:gms
cc: P. Ferrone

IOM: _ Waste Fuel Spill at Fire Training Facility, Calv., 8/24 - - - Sept. 7, 1982

9/3/82:

- o Kost sampled the surface water from the four test wells. His report will state "found no product floating".
- o He will continue to monitor in the future, as he said he found Well #2 had little globules and the water had a sewer odor or tinge. Well #3 also had a little sewer odor. Wells #1 and #4 were O.K.
- o Kost also requested that the road be scraped (6" cut) in the area of the spill).
- o Contacted Marine Pollution Control to come back for road clean-up.

9/7/82:

- o Marine Pollution Control finished road clean-up job and removed 100 yards contaminated soil to Brookhaven Landfill.

JO:gms

Attachments (2)

8/25/82: (continued)

- o Two soil samples given to Q.C. Lab. (Lab. #30317) with parameters for leachate analysis.
- o Bill Miller called - Provided answers to questions for his spill report to NAVAIR and Federal EPA Regional Office. (See lettergram INE-8, dated 8/30/82, from NAVPRO to NAVAIR.)

8/26/82:

- o D. Kost and J. Scharrer (NYSDOT) and Walter Parish and George Schilpp (NYSDEC) on site.
- o Contaminated soil being stockpiled until lab results are complete.
- o Fire fighting diked area being cleaned - stones being removed from moist area - waste fuel put back in holding tank - fuel/water trucked to separator for treatment.

8/27/82:

- o Phoned Parish (NYSDEC) with test results of leachate analysis (see letter from J. Ohlmann to W. Parish, dated 9/7/82) - NYSDEC approval given. I phoned Jim Hile, Brookhaven Landfill - approval also given.
- o Marine Pollution Control clean-up almost complete - removal of contaminated soil around storage tank to be included.
- o Soil sample taken with a hand auger, about 7 ft. down, at a point 6 ft. north of northwest corner of the main diked area.
 - Because soil sample had smell (not really detectable - decay?), four test wells requested.

Note: Parish took a sample of the soil.

8/30/82:

- o Test wells completed (see sketch for location).
- o Kost inspected - not happy with glue fittings, had requested threaded. O.K.
- o Clean-up complete. Some material sent to Brookhaven Landfill.

8/31/82:

- o Marine Pollution Control removed 227 yards today - all clean-up completed - (included 3 drums of liquid) - per Dave Miller, Supervisor.

Memorandum

Action Information Only Reply Requested

Date March 8, 1983
No. FDP-71-383

From: J. Ohlmann

Name

B08/30

296

GAC

2385

To: File

Name

Med Station - Pit - Group No. - Company

Extension

Subject:

FUEL SPILL ON PAD AT THE ENGINE RUN-UP AREA IN CALVERTON
ON FEBRUARY 24, 1983

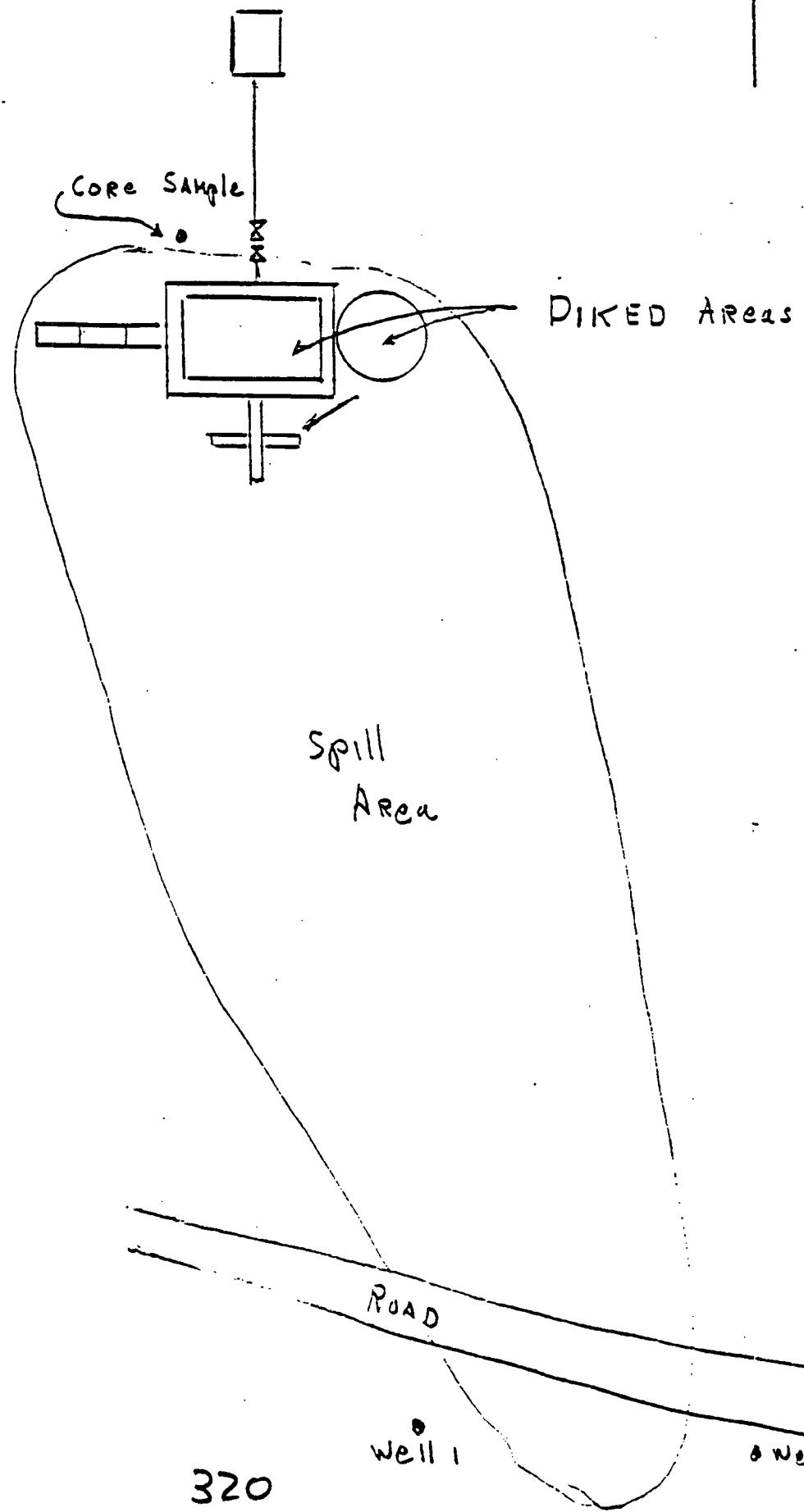
JP#5 fuel spill (approximately 30 gallons) on the pad at the Engine Run-Up Area, at 2-3 A.M. on February 24, 1983, from a aircraft fuel cell leak. Spill washed into ground by GAC Fire Fighting Crew. Authorities (N.Y.S.D.O.T., Albany and Hauppauge, and SCDEHS) notified at 8 A.M. on February 24, 1983. Marine Pollution Control removed contaminated soil on February 25, 1983.

Suffolk County Dept. of Health Services (SCDEHS) inspected spill site on March 2, 1983. See attached SCDEHS inspection report.

JO:gms
Attachment

FIRE TRAINING FACILITY

N
A





Memorandum

Action Information Only Reply Requested

Date June 22, 1983
No. FDP-174-683

From: J. Ohlmann

308/30 296

GAC

To: File

Mail Station - Pit - Group No. - Company

Extension

Subject: FUEL SPILL AT CALVERTON FUEL DEPOT, JUNE 16, 1983

Approximately 100 - 150 gallons of JP5 fuel spilled on concrete pad and its dirt edge, at 10:30 A.M., while filling a truck.

Speedy-Dri was used to dike the area and water was used to wash to the dike. Liquid material on the concrete pad was sucked up or absorbed and contaminated dirt was removed.

Over-filling of truck was due to a malfunction of the automatic shut-off valve in the truck. This is an air operated valve and truck has been taken out of service to fix air system.

Incident reported at 11:30 A.M. to NYSDOT (Charles Ruk, Hauppauge) and SCDE (Alex Santino). SCDE (E. Governale) inspected spill area on June 21, 1983.

JO:gms

Memorandum

Action Information Only Reply Requested

Date April 25, 1983
No. FDP-122-483

From: J. Ohlmann

B08/30

296

GAC

2385

To: File

Mail Station - Pit - Group No - Company

Extension

Name

Name

Extension

Subject: FUEL SPILL AT CALVERTON FLIGHT LINE, MARCH 26, 1983

Reported at 1:30 P.M. (Spill No. 822-197), JP5 spill on concrete bed of Flight Line, to N.Y.S.D.O.T. in Albany. Approximately 25 gallons were contained on concrete and removed with absorbent. The cause of the incident was a ruptured fuel line.

Larry Petererec of N.Y.S.D.O.T. in Hauppauge followed up with a call on 3/28/83.

No problem - No environmental impact.

J0:gms

Memorandum

Action Information Only Reply Requested

Date April 6, 1984
No. FDP-93-484

From: J. Ohlmann

Name

B08/30 296 GAC 2385

Extension

Mail Station - Pt - Group No - Company

To: File

Name

Mail Station - Pt - Group No - Company

Extension

Subject: FUEL SPILL AT CALVERTON FUEL DEPOT, 4/6/84

At 9:15 A.M., while filling a truck, approximately 40 gallons of Jet A fuel spilled on the concrete pad. The spill was contained on the concrete and cleaned up.

The cause of the spill was faulty equipment - a valve on the truck.

NYSDOT (Hauppauge) was notified same morning.

J0:gms



Memorandum

File

Action Information Only Reply Requested

Date 12/21/83
No. FDP-35-1281

From: J. Ohlmann

Name

Mail Station - Pit. - Group No. - Company

Extension

To: File

Name

Mail Station - Pit. - Group No. - Company

Extension

Subject: JP5 SPILL AT CALVERTON FUEL DEPOT ON 12/20/83

At approximately 6:30 P.M., 25-40 gallons of JP5 spilled on the concrete while filling a truck.

The spill was contained, absorbed and removed. There was no environmental impact.

Spill was caused by malfunctioning valve on the truck. This has been repaired.

Spill was reported to NYSDOT (Albany) at approximately 7 A.M., 12/20/83.

JO/gms



Memorandum

50

Action Information Only Reply Requested

Date Dec. 17, 1984
No. FDP-311-1284

From: J. Ohlmann

B08/30 296 GAC 52385

To: File

Mail Station - Pit - Group No. - Company Extension

Subject: JP5 FUEL SPILL, CALVERTON FUEL DEPOT, 11/20/84

At approximately 11:00 A.M., 25 gallons of JP5 spilled on the blue stone area in the Fuel Depot Tank Farm area. The spill occurred from the vent line on tank #9 while a truck was being filled. Tank #7 was actually being pumped, but the pump discharge from each tank is manifolded to a filter and fuel was pumped into tank #9 when its pump check valve did not hold.

Marine Pollution Control will remove any contaminated soil.

N.Y.S.D.O.T. was notified and Pete Jockolits inspected the site on 11/23/84.

Note: It has since been determined to remove 400 yards of contaminated soil, backfill and put in 3 monitoring wells.

JO:gms

Memorandum

Action Information Only Reply Requested

Date Nov. 27, 1984
No. FDP-288-1184

From: J. Ohlmann

B08/30 296 GAC 52385

To: File

Mail Station - Pit - Group No. - Company

Extens.

Name

Name Station - Pit - Group No. - Company

Extens.

Subject: JP4 FUEL SPILL

CALVERTON, EF111 THRUST STAND - 10/6/84

At approximately 2:15 A.M., 40 gallons of JP4 fuel spilled on the Thrust Stand Apron and also ran off into the dirt area. A technician went to depressurize the fuel system in an aircraft and inadvertently selected the "dump" switch. He should have selected "off" position of the pressure switch.

The spill on the apron was absorbed up by GAC personnel with Speedi-Dri. Marine Pollution Control excavated the contaminated soil and removed it to an approved landfill.

NYSDEC (Albany) was notified of the spill.

JO:gms



Memorandum

Action Information Only Reply Requested

Date 5 March 1985
No. FDP-49-385

From: J. Ohlmann, Facilities Engg

B08-030-0296

52385

Name

Mail Station - Pit - Group No. - Company

Extensi

To: File

Name

Mail Station - Pit - Group No. - Company

Extensi

Subject:

JET A FUEL SPILL, CALVERTON OLD FLIGHT LINE, 2/25/85

At approximately 8:15 a.m., 10 gallons of Jet A spilled on the concrete pad area of the Old Flight Line. The spill occurred from a malfunction with the C2A aircraft fuel system while filling.

This was the same type of spill incident we had on 2/21/85. We thought the malfunction had been corrected.

All spilled material was contained and cleaned up by Grumman. N.Y.S. DOT, Hauppauge, John Schere, was notified of the incident at approximately 10:00 a.m.

JO:w



Memorandum

JO

Action Information Only Reply Requested

Date Dec. 21, 198
No. FDP-27-185

From: J. Ohlmann

Name

B08/30 296 GAC 52385

Extension

To: File

Name

Mail Station - Pit - Group No. - Company

Extension

Subject: SWALE CLEAN-UP, FUEL CALIBRATION AREA - CALVERTON

During an inspection by Walter Parish, NYSDEC, on 11/28/84, we were requested to clean up the swale near the oil/water separator discharge behind the Fuel Calibration Area. A previous unnoticed malfunction had caused a stain in the swale area. The stain had not been obvious previously because of the high water table. It had become visible when the water table had dropped.

Marine Pollution Control, Inc. cleaned up the swale, cleaned the oil/water separator and removed the oil and water. Additional area clean-up is still in process.

JO:gms

GRUMMAN

Memorandum

JW

Action Information Only Reply Requested

Date June 11, 1985
No. FDP-121-685

From: J. Ohlmann

Name

Mar Station - Pt - Group No - Company

Extension

To: File

Name

Mar Station - Pt - Group No - Company

Extension

Subject: FUEL OIL SPILL, CALVERTON RUNWAY, 6/6/85

Approximately 5 gallons (1-10) of Jet Fuel Oil from a EF111 aircraft spilled on the ground on the side of the northwest runway. This was discovered at 3:30 P.M. on 6/6/85 and reported at 4:45 P.M. on 6/6/85 to the New York State Dept. of Transportation (Larry Peterick, Hauppauge office).

The aircraft had a tire blow-out during take-off at 12:00 Noon and half the aircraft slid off the runway onto the side shoulder. It broke the landing gear and dug into the dirt.

The aircraft had to be jacked up for removal via a dolly. It was at this time that the leak was noticed and our Fire Rescue Squad sprayed the area with AFF foam.

The liquid was sucked up by Grumman and Marine Pollution Control will remove the contaminated soil (estimate 8-10 yards).

JO:gms

Memorandum

Action Information Only Reply Requested

Date 5 March 1985
No. FDP-48-385

From: J. Ohlmann, Facilities Engg

B08-030-0296

52385

To: File

Name _____
Mail Station - Pit - Group No. - Company _____ Extension _____

Subject: JET A FUEL SPILL, CALVERTON OLD FLIGHT LINE, 2/21/85

At approximately 4:00 p.m., 10 gallons of Jet A spilled on the concrete pad area of the Old Flight Line. The spill occurred from overfilling a C2A aircraft.

All spilled material was contained and cleaned up by Grumman. N.Y.S. DOT, Albany was notified of the incident at approximately 8:00 p.m.

NOTE: It has since been determined that the spill was not from overfilling. There is a malfunction with aircraft fuel system while filling.

JO:w

APPENDIX C

**MARINE POLLUTION CONTROL MONITORING
WELL REPORTS**

JUNE 1990 TO OCTOBER 1991



Grumman - Calverton

Fuel Depot

Spill #82 - 1680

Prepared by:

MPC Environmental Services
June 11, 1990

P.O. Box 2220
375 Dunton Avenue, East Patchogue, N.Y. 11772
516-654-4900 FAX 516-654-4935

333

Because Immediate Action Is The Best Remedy.

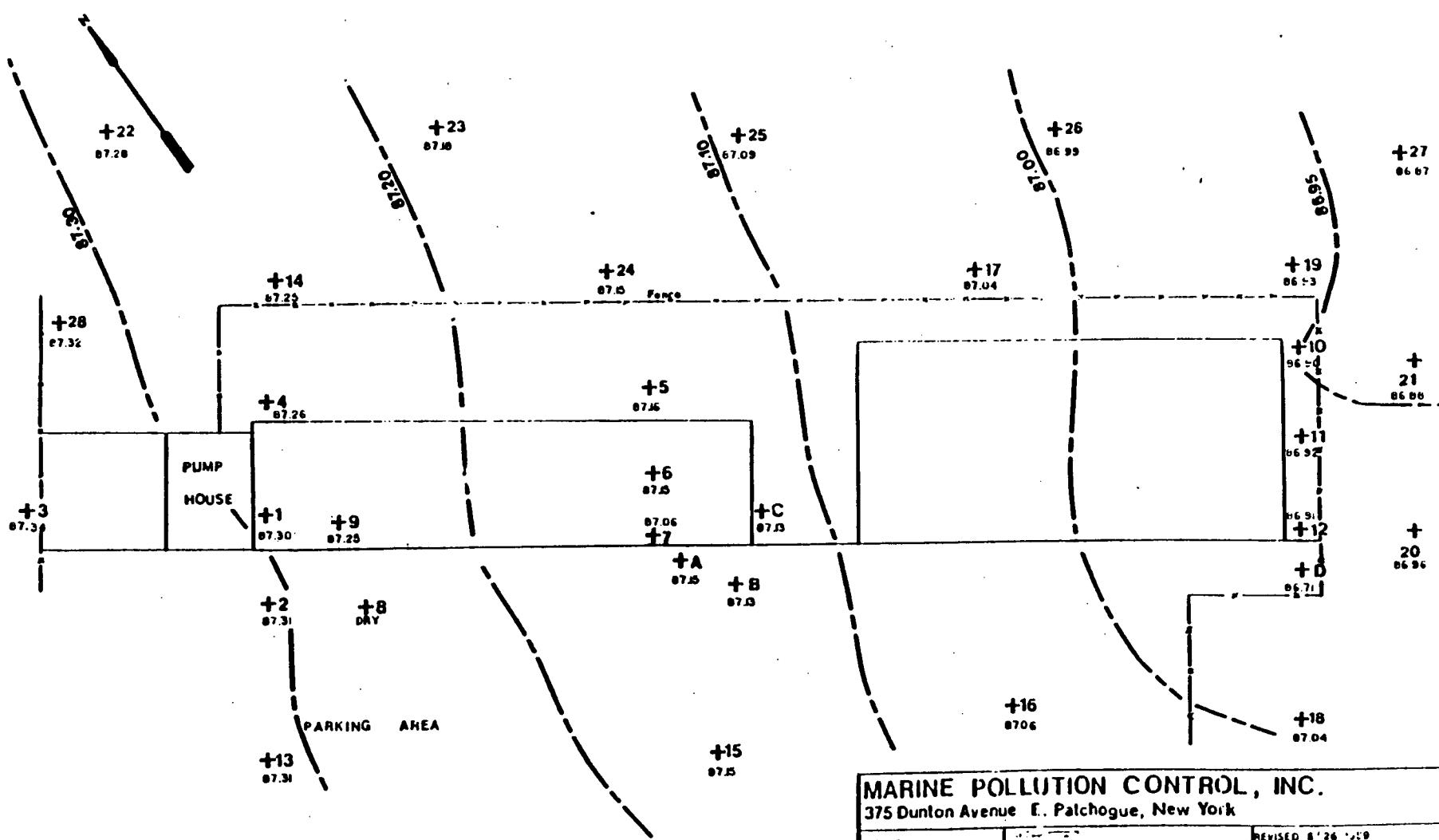
An Equal Opportunity Employer

Discussion

In order to define the extent of the dissolved plume at the fuel depot, monitoring wells number 22 through 28 were installed on May 10 and 11, 1990 (Figure 1). The location of these wells were selected to determine the boundary of the plume downgradient. The drill logs for these wells are located in the Appendix. All drill cuttings were monitored using a photoionization detector (Photovac Tip II).

On May 17, 1990, the wells were pumped purging 3 to 5 casing volumes of water. Before pumping each well the pump was decontaminated by pumping a solution of alconox and water from a clean drum. The pump was then placed in another clean drum pumping water only, as a final rinse. The order of wells pumped was determined by the amount of contamination detected from the drill cuttings using the Photovac Tip II. Clean wells were pumped first, ending with the dirtiest well. Well sampling was in the same order, using a decontaminated stainless steel bailer to collect the samples.

Vells	Top of pipe elevation
1	102.55
2	101.31
3	101.22
4	103.54
5	103.07
6	102.22
7	102.16
8	101.55
9	103.15
10	103.81
11	103.07
12	104.37
A	101.37
B	101.45
C	102.48
D	103.05
13	100.77
14	101.67
15 (W)	100.88
16 (W)	101.19
17	101.04
18 (V)	101.24
19	99.86
20	100.96
21	99.44
22	100.37
23	101.08
24	100.26
25	100.74
26	100.50
27	97.57
28	100.84



MARINE POLLUTION CONTROL, INC.
375 Dunton Avenue E., Patchogue, New York

SCALE: DRAWN FROM DATA OF
DATE: 3/22/1989 REVISED 6/26/1990
6/1/1990

CALVERTON FUEL DEPOT

GROUNDWATER CONTOURS

Spill: 82-1680

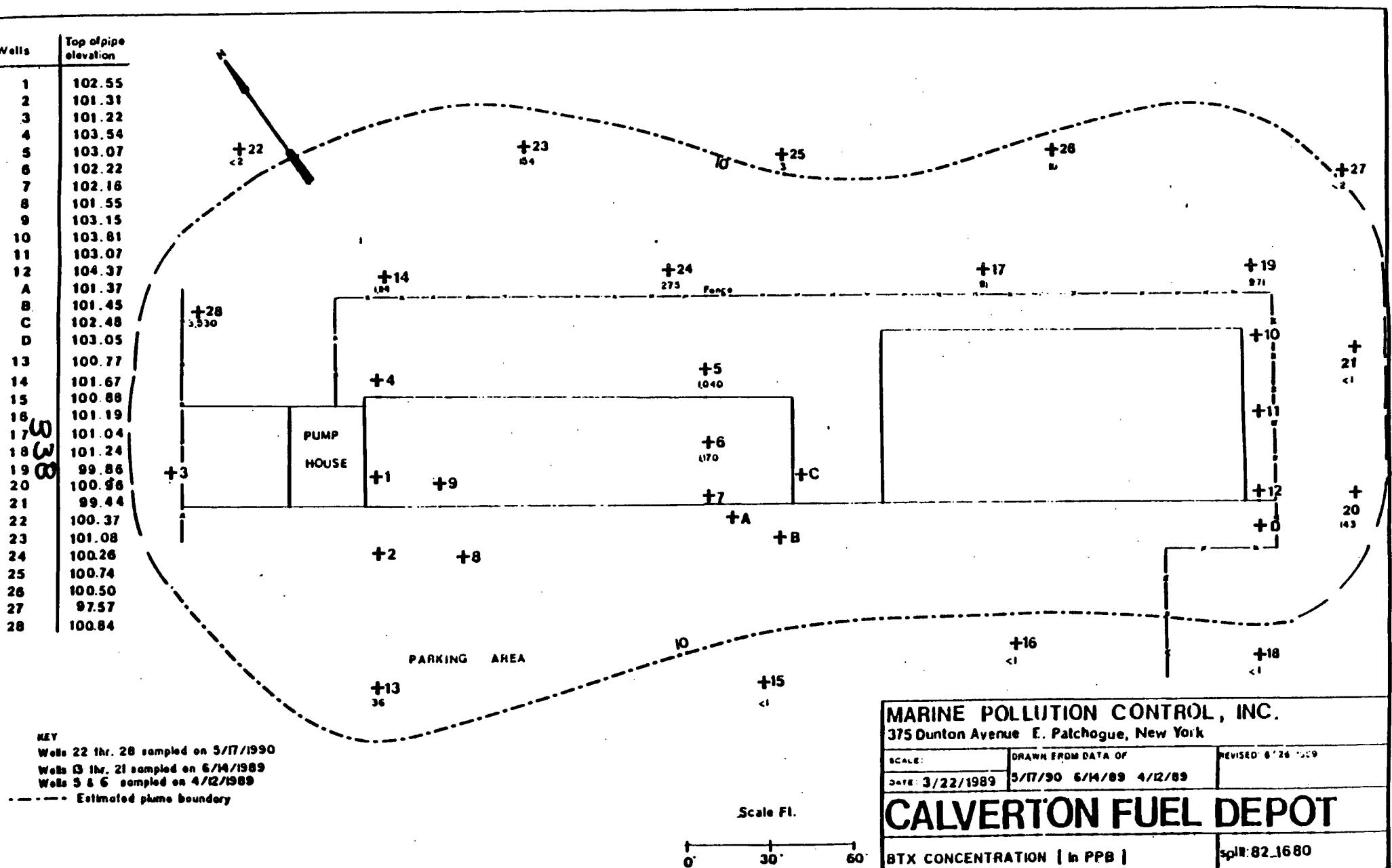
FIGURE 1

Once samples were collected, they were packed in ice and brought to Ecotest the following morning. The analysis to be performed were EPA method 602 and DOH 310-19. The lab results are summarized in Table 1, which were used to construct the estimated dissolved plume boundary shown in Figure 2. In order to project the boundary, lab results were used from previous sampling days to project an approximate plume. Monitoring wells number 20 and 21 were last sampled 1 year ago, and since they are downgradient they should be sampled again. For more accuracy all monitoring wells should be sampled at the same time, since dissolved concentrations change with time. However, from the information we have we are able to estimate the extent of the plume downgradient.

At present there is concern regarding the high concentrations found in monitoring well number 28. Drill cuttings were found to be heavily saturated with a fuel, as indicated by the drill log. In order to determine the source of this contamination MPC Environmental Services recommends that monitoring well number 3 be sampled, since we have no data from that well. We would also recommend installing additional monitoring wells as shown in Figure 3. It is now important to concentrate in the area around monitoring well number 28 to determine where the contamination is originating from, since it is upgradient of the plume.

Table 1.
Sample Results - Monitoring Wells

Date	Well Number	Total BTX (ppb)	Petroleum Hydro. (ppm)
05/17/90	22	<2	<0.4
05/17/90	23	154	<0.4
05/17/90	24	275	<0.4
05/17/90	25	3	<0.4
05/17/90	26	1Q	<0.4
05/17/90	27	<2	<0.4
05/17/90	28	3,530	39
06/14/89	13	36	-
06/14/89	14	1,114	-
06/14/89	15	<1	-
06/14/89	16	<1	-
06/14/89	17	81	-
06/14/89	18	<1	-
06/14/89	19	971	-
06/14/89	20	143	-
06/14/89	21	<1	-
04/12/89	5	1,040	-
04/12/89	6	1,170	-



MARINE POLLUTION CONTROL, INC.
375 Dunton Avenue E. Patchogue, New York

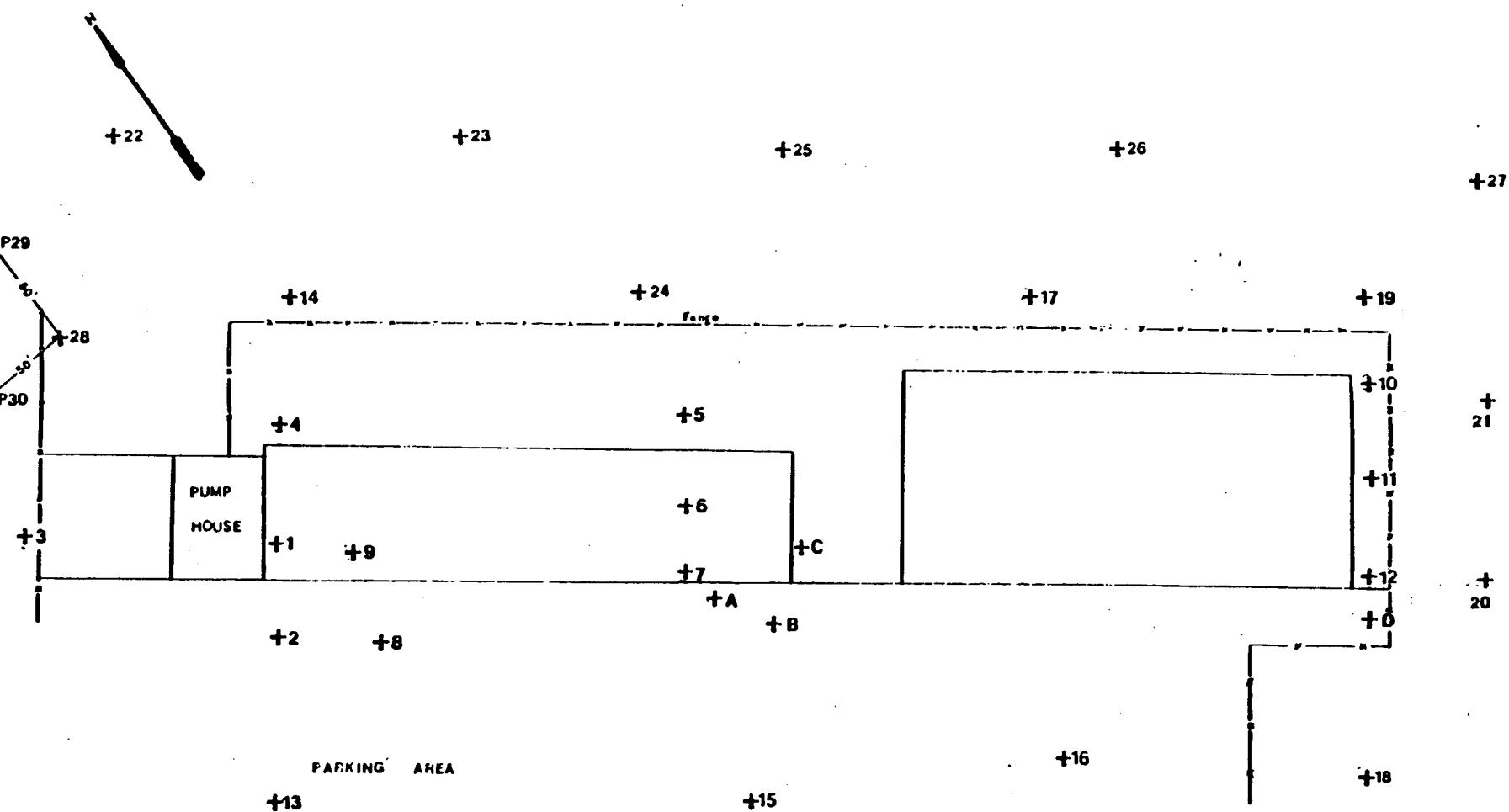
SCALE: DRAWN FROM DATA OF REVISED: 6/26/89
DATE: 3/22/1989 3/17/90 6/14/89 4/12/89

CALVERTON FUEL DEPOT

BTX CONCENTRATION (in PPB)

split:82_1680

Wells	Top of pipe elevation
1	102.55
2	101.31
3	101.22
4	103.54
5	103.07
6	102.22
7	102.16
8	101.55
9	103.15
10	103.81
11	103.07
12	104.37
A	101.37
B	101.45
C	102.48
D	103.05
13	100.77
14	101.67
15	100.88
16	101.19
17	101.04
18	101.24
19	99.86
20	100.96
21	99.44
22	100.37
23	101.08
24	100.26
25	100.74
26	100.50
27	97.57
28	100.84



④ PROPOSED GROUNDWATER MONITORING WELLS

MARINE POLLUTION CONTROL, INC.
375 Dunton Avenue E. Patchogue, New York

SCALE:	APPROVED BY:	REVISED: 6/26/1989
DATE: 3/22/1989		

CALVERTON FUEL DEPOT

PROPOSED WELL LOCATIONS

SPILL: 82-1680

FIGURE 3

Appendix

DRILLING / WELL LOG

Boring/Well #22 CLIENT GRUMAN - CALVERTON Page 1 of 1
 Location FUEL DEPOT Date 5/10/90
 Total Depth Drilled 30' Type of Sample AUGER Interval 5'
 Casing Installed 10' Screen Installed 20'
 Drilling Method H.S.A. Drilling Fluid used NONE
 Drilling Contractor MPC ENVIRONMENTAL SERV Driller M. MULLER
 Prepared By GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth From	Depth To	OVA Reading (ppm)	Sample Description
<u>0'</u>	<u>5'</u>	<u>132</u>	FINE-MEDIUM, YELLOW/ORANGE SILTY SAND, 5-10% FINE GRAVEL, POORLY SORTED.
<u>5'</u>	<u>10'</u>	<u>66</u>	FINE-MEDIUM, TAN SAND, NO GRAVEL, WELL SORTED.
<u>10'</u>	<u>15'</u>	<u>54</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
<u>15'</u>	<u>20'</u>	<u>41</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
<u>20'</u>	<u>25'</u>	<u>38</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
<u>25'</u>	<u>30'</u>	<u>18</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
			<u>WELL CONSTRUCTION</u>
			<u>20' OF 0.020" SCREEN</u>
			<u>10' OF SOLID PIPE</u>
			<u>BACKFILL</u>
			<u>341</u>

DRILLING / WELL LOG

Boring/Well #23 CLIENT GRUMAN - CALVERTON Page 1 of 1
 Location FUEL DEPOT Date 5/10/90
 Total Depth Drilled 30' Type of Sample AUGER Interval 5'
 Casing Installed 8' Screen Installed 20'
 Drilling Method H.S.A. Drilling Fluid used NONE
 Drilling Contractor MPC ENVIRONMENTAL SERV. driller M. MULLE
 Prepared By GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth OVA Reading
 From To (ppm)

Sample Description

<u>0'</u>	<u>5'</u>	<u>73</u>	FINE-MEDIUM, BROWN SILTY SAND, 10-15% GRAVEL, POORLY SORTED.
<u>5'</u>	<u>10'</u>	<u>41</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
<u>10'</u>	<u>15'</u>	<u>57</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
<u>15'</u>	<u>20'</u>	<u>30</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, DAMP.
<u>20'</u>	<u>25'</u>	<u>17</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
<u>25'</u>	<u>30'</u>	<u>64</u>	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET, SLIGHT ODOR.
			WELL CONSTRUCTION

20' OF 0.020" SCREEN
8' OF SOLID PIPE.

BACKFILL

DRILLING / WELL LOG

Boring/Well #24 Client GRUMAN - CALVERTON Page 1 of 1
 Location FUEL DEPOT Date 5/10/90
 Total Depth Drilled 30' Type of Sample AUGER Interval 5'
 Casing Installed 10' Screen Installed 20'
 Drilling Method H.S.A. Drilling Fluid used NONE
 Drilling Contractor MPC ENVIRONMENTAL SERV. Driller M. MULLER
 Prepared by GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth OVA Reading
 From To (ppm)

Sample Description

0'	2'	↑	FINE-MEDIUM, YELLOW/ORANGE SAND, SOME SILT, 5-10% GRAVEL, POORLY SORTED.
2'	5'	33	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
5'	10'	45	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
10'	15'	20	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
15'	20'	19	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, DAMP.
20'	25'	14	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
25'	30'	141	FINE-MEDIUM, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET, SLIGHT ODOR.
<u>WELL CONSTRUCTION</u>			
20' OF 0.020" SCREEN			
10' OF SOLID PIPE			
343 BACKFILL			

DRILLING / WELL LOG

Boring/Well #25 CLIENT GRUMAN - CALVERTON Page 1 of 1
Location FUEL DEPOT Date 5/10/90
Total Depth Drilled 30' Type of Sample AUGER Interval 5'
Casing Installed 10' Screen Installed 20'
Drilling Method H.S.A. Drilling Fluid Used NONE
Drilling Contractor MPC ENVIRONMENTAL SERV. Driller M. MULLER
Prepared By GEORGE VASSILEY - HYDROGEOLOGIST

Sample	Depth	OVA Reading	Sample Description
From	To	(ppm)	

DRILLING / WELL LOG

Boring/Well #26 CLIENT GRUMAN - CALVERTON Page 1 of 1
Location FUEL DEPOT Date 5/11/90
Total Depth Drilled 30' Type of Sample AUGER Interval 5'
Casing Installed 10' Screen Installed 20'
Drilling Method H.S.A. Drilling Fluid Used NINE
Drilling Contractor MPC ENVIRONMENTAL SERVICES Driller M. MULLER
Prepared By GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth OVA Reading
From To (ppm)

Sample Description

0'	2'	↑	FINE, BLACK TO GRAY SILTY SAND, 5-10%
		↓	GRAVEL, POORLY SORTED, STRONG SOLVENT odors?
2'	5'	1,378	FINE, YELLOW/ORANGE SAND, 5-10% GRAVEL POORLY SORTED, SLIGHT ODOR.
5'	10'	458	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
10'	15'	386	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED.
15'	20'	1,982	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, DAMP.
20'	25'	843	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
25'	30'	678	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.

WELL CONSTRUCTION

20' AT 0.020" SCREEN

10' OF SOLID PIPE

345 BACKFILL FROM MW # 27

DRILLING / WELL LOG

Boring/Well #27 CLIENT GRUMAN - CALVERTON Page 1 of 1
Location FUEL DEPOT Date 5/11/90
Total Depth Drilled 30' Type of Sample AUGER Interval 5'
Casing Installed 10' Screen Installed 20'
Drilling Method H.S.A. Drilling Fluid Used NONE
Drilling Contractor MPC ENVIRONMENTAL SERV. Driller M. MULLER
Prepared By GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth OVA Reading
From To (ppm) Sample Description

0'	5'	9	FINE, YELLOW/ORANGE SILTY SAND, <5% GRAVEL, POORLY SORTED.
5'	10'	6	FINE, TAN SAND; <5% GRAVEL, MODERATELY SORTED.
10'	15'	8	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, DAMP.
15'	20'	7	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
20'	25'	7	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
25'	30'	7	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
<u>WELL CONSTRUCTION</u>			
20' OF 0.020" SCREEN			
10' OF SOLID PIPE			
BACK FILL			

DRILLING / WELL LOG

Boring/Well #28 CLIENT GRUMAN - CALVERTON Page 1 of 1
 Location FUEL DEPOT Date 5/11/90
 Total Depth Drilled 30' Type of Sample AUGER Interval 5'
 Casing Installed 10' Screen Installed 20'
 Drilling Method H.S.A. drilling fluid used NONE
 Drilling Contractor MPC ENVIRONMENTAL SERV. driller M. MULLER
 Prepared By GEORGE VASSILEV - HYDROGEOLOGIST

Sample Depth OVA Reading

From To (ppm)

Sample Description

0'	1'		CONCRETE / REBAR
1'	3'	↑	FINE - MEDIUM, YELLOW ORANGE SILTY SAND, 10-15% GRAVEL, POORLY SORTED.
3'	5'	1,976	BLACK TOPSOIL (FILL MATERIAL?)
			SLIGHT ODOR.
5'	10'	56	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, SLIGHT ODOR.
10'	15'	78	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, DAMP.
15'	20'	117	FINE, TAN SAND, <5% GRAVEL, MODERATELY SORTED, WET.
20'	25'	1,900	FINE, GRAY STAINED SAND, <5% GRAVEL, MODERATELY SORTED, WET, STRONG ODORS.
25'	30'	1,305	FINE, GRAY STAINED SAND, <5% GRAVEL, MODERATELY SORTED, WET, ODORS.
			WELL CONSTRUCTION
			20' OF 0.020" SCREEN
			347 10' OF SOLID PIPE
			DAC-III

ECOLEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C901562/4

05/29/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keehey

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1205, MW #22

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1
Petrol. Hydrocarbons	mg/L	<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:

DIRECTOR

348

rn=

6950

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C901562/5

05/29/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keashey

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1225, MW #23

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	4
Ethyl Benzene	ug/L	29
m + p Xylene	ug/L	21
o Xylene	ug/L	100
Petrol. Hydrocarbons	mg/L	<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:

DIRECTOR

349

rn=

6951

NYSDOH ID# 10320

ECODEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C901562/6

05/30/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahay

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1340, MW #24

ANALYTICAL PARAMETERS

Benzene	ug/L	2
Toluene	ug/L	68
Ethyl Benzene	ug/L	23
m + p Xylene	ug/L	120
o Xylene	ug/L	62
Petrol. Hydrocarbons	mg/L	<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:

DIRECTOR

350

rn# 6952 NYSDOH ID# 10320

ECO TEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C901562/7****05/30/90**

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahey**PO# 30-28955**

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1253, MW #25

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	3
Petrol. Hydrocarbons	mg/L	<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:**DIRECTOR****351****rn=****6953****NYSDOH ID# 10320**

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C901562/8

05/30/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahay

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1420, MW #26

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	2
m + p Xylene	ug/L	<2
o Xylene	ug/L	8
Petrol. Hydrocarbons mg/L		<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:

DIRECTOR

352

rn=

6954

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C901562/9****05/30/90**

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahey**PO# 30-28955**

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1315, MW #27

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1
Petrol. Hydrocarbons	mg/L	<0.4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC
REMARKS:

DIRECTOR**353**

rn=

6955

NYSDOH ID# 10320

ECOLTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C901562/10

05/30/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keashey

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 05/17/90 RECEIVED: 05/18/90

SAMPLE: Water Sample, fuel depot, 1400, MW #28

ANALYTICAL PARAMETERS

Benzene	ug/L	<5
Toluene	ug/L	110
Ethyl Benzene	ug/L	220
m + p Xylene	ug/L	2500
o Xylene	ug/L	700
Petrol. Hydrocarbons	mg/L	39

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, G. Vassilev-MPC

REMARKS:

DIRECTOR

SAMPLING DATA SHEET

DATE: 5/17/90 (MPC)
 LOCATION: GRUMAN - CALVERTON FUEL DEPOT
 SPILL#: _____
 POW: _____
 ANALYSIS: 602 + PET. HYDROC.
 LAB NAME: ECOTEST LAB NUMBER: _____
 TOTAL WELLS SAMPLED: _____ TOTAL WELLS NOT SAMPLED: _____
 SAMPLES COLLECTED BY: GEORGE VASSILEV

- ① BILL + RESULTS TO ATTEN. OF GRUMAN
 ② RESULTS TO ATTEN. OF GEORGE VASSILEV (MPC)

WELL#	COMMENTS	WELL#	COMMENTS
1		21	
2		22	Time 1205
3		23	Time 1225
4		24	Time 1245 1340
5		25	Time 1255
6		26	Time 1420
7		27	Time 1315
8		28	Time 1400
9		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

UL- 5-89 WED 16:37 ECO TEST LABS INC.

P.04

ECOTest Laboratories Inc
 377 Shefffield Ave
 North Babylon NY 11703
 516 422-5777

LAB NO. C891769/3

07/05/89

Grumman Aerospace Corporation
 Mail Station A03-12
 Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680
 COLLECTED BY: M.P.C. DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #13, 1115

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	7
Ethyl Benzene	ug/L	7
m + p Xylene	ug/L	12
o Xylene	ug/L	9

cc: B. Andres, GAC, J. Emington, MPC

REMARKS:

DIRECTOR

356

JUL - 5-89 WED 16:36 ECOTEST LABS INC.

P. 03

ECOTEST Laboratories Inc
 377 Sheffield Ave
 North Babylon NY 11703
 516 422-5777

LAB NO. C891769/2

07/05/89

Grumman Aerospace Corporation
 Mail Station A03-12
 Bethpage, NY 11714
 ATTN: John Ohlmann

PO# 30-2A965

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680

COLLECTED BY: M.P.C.

DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #14, 1200

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	44
Ethyl Benzene	ug/L	140
m + p Xylene	ug/L	660
o Xylene	ug/L	270

ANALYTICAL PARAMETERS

cc:B.Andrea, GAC, J.Emington, MPC

REMARKS:

DIRECTOR

357

JUL - 5-89 WED 16:38 ECOTEST LABS INC.

P. 06

Ecotest Laboratories Inc
377 Sheffield Ave
North Babylon NY 11703
516 422-5777

LAB NO. 0891769/5

07/05/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680
COLLECTED BY: M.P.C. DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #13, 1030

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: R. Andres, GAC, J. Emington, MPC

REMARKS:

DIRECTOR

JUL - 5-89 WED 16:39 ECOTEST LABS INC.

P.8

ECOTest Laboratories Inc
377 Snoffield Ave
North Babylon NY 11703
Tel 422-5777

LAB NO.C891769/7

07/05/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: John Chilmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680
COLLECTED BY: M.P.C. DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #16, 1000

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

C.C.: B. Andrea, GAC, J. Emlington, MPC

REMARKS:

DIRECTOR

389

JUL - 5-89 WED 16:37 ECOTEST LABS INC.

P.0:

Ecotest Laboratories Inc
 377 Shoffield Ave
 North Babylon NY 11703
 516 422-5777

LAB NO. C891769/4

07/05/89

Grumman Aerospace Corporation
 Mail Station A03-12
 Bethpage, NY 11714
 ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680

COLLECTED BY: M.P.C. DATE COL'D:06/14/89 RECEIVED:06/16/89

SAMPLE: Water sample, Well #17, 1245

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	1
Ethyl Benzene	ug/L	24
m + p Xylene	ug/L	49
o Xylene	ug/L	6

ANALYTICAL PARAMETERS

C.J. H. Andres, GAC, J. Emington, MPC

REMARKS:

DIRECTOR

XEROX TELECOPIER 296 : 7-6-89; 3:34 PM;

4220710

0044500 , FIU

JUL - 5-89 WED 16:48 ECOTEST LABS INC.

P. 1 E

Ecotest Laboratories Inc
377 Sheffield Ave
North Babylon NY 11703
S16 422-5777

LAB NO. 0891769/9

07/05/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: John Ohmann

PO# 30-28855

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680

COLLECTED BY: M.P.C.

DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #18, 1500

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

C.: H. Andres, GAC, J. Emington, MPC

REMARKS:

DIRECTOR

JUL - 5-89 WED 16:36 ECOTEST LABS INC.

P. 02

Ecotest Laboratories Inc
377 Shefffield Ave
North Babylon NY 11703
516 422-5777

LAB NO. C891769/1

07/03/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: John Ohlmann

PO# 30-20055

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680
COLLECTED BY: M.P.C. DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #19, 1330

ANALYTICAL PARAMETERS

Benzene	ug/L	800
Toluene	ug/L	24
Ethyl Benzene	ug/L	58
m + p Xylene	ug/L	64
o Xylene	ug/L	25

ANALYTICAL PARAMETERS

cc: R. Andres, GAC, J. Emington, MPC

REMARKS:

DIRECTOR

362

AERUA TELETYPE 290 : 17-0-89; 3:33 PM.

7260110

0044930 , P.P.

JUL - 5-89 WED 16:38 ECOTEST LABS INC.

P. 07

Ecotest Laboratories Inc
377 Sheffield Ave
Norton Babylon NY 11703
516 422-5777

LAB NO.C851769/6

07/05/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: John Ohmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1680

COLLECTED BY: M.P.C.

DATE COL'D:06/14/89 RECEIVED:06/16/89

SAMPLE: Water sample, Well #20, 930

ANALYTICAL PARAMETERS

Benzene	ug/L	72
Toluene	ug/L	12
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	34
o Xylene	ug/L	25

ANALYTICAL PARAMETERS

cc: B. Andres, GAC, J. Emington, MPC

REMARKS:

363

DIRECTOR

JP

JUL - 5-89 WED 16:39 ECOTEST LABS INC.

P. 8

Ecotest Laboratories Inc
377 Shefffield Ave
North Babylon NY 11703
516 422-5777

LAB NO. C891769/8

07/05/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fuel Depot, SP #82-1E80
COLLECTED BY: M.P.C. DATE COL'D: 06/14/89 RECEIVED: 06/16/89

SAMPLE: Water sample, Well #21, 1415

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc:B. Andres, GAC, J. Ewington, MPC

REMARKS:

364

DIRECTOR

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C891056/1****05/01/89**

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann**PO# 30-28955****SOURCE OF SAMPLE: Grumman, Calverton****COLLECTED BY: MarPollCon DATE COL'D:04/12/89 RECEIVED:04/12/89****SAMPLE: Water sample, Fuel Depot, OW-5, 1230****ANALYTICAL PARAMETERS**

Benzene	ug/L	120
Toluene	ug/L	380
Ethyl Benzene	ug/L	110
m + p Xylene	ug/L	350
o Xylene	ug/L	80

ANALYTICAL PARAMETERS**cc:MPC-John Emington****REMARKS:****365****DIRECTOR**

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTIN

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C891056/2

05/01/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton

COLLECTED BY: MarPolCon DATE COL'D: 04/12/89 RECEIVED: 04/12/89

SAMPLE: Water sample, Fuel Depot, OW-6, 1130

ANALYTICAL PARAMETERS

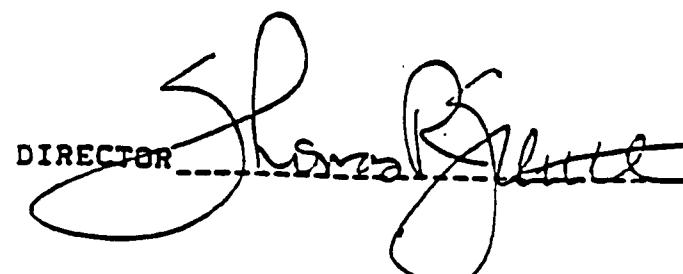
Benzene	ug/L	70
Toluene	ug/L	300
Ethyl Benzene	ug/L	70
m + p Xylene	ug/L	470
o Xylene	ug/L	260

ANALYTICAL PARAMETERS

cc:MPC-John Emington

REMARKS:

DIRECTOR



366



June 11, 1990

Mr. John Ohlmann
Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, N.Y. 11714

RE: Calverton - Fuel Depot Spill #82-1680

Enclosed please find a report regarding the fuel depot at the Calverton location. Should there be any questions or comments regarding this site, please do not hesitate to call.

Sincerely,

George Vassilev
George Vassilev
Hydrogeologist

P.O. Box 2220
375 Dunton Avenue, East Patchogue, N.Y. 11772
516-654-4900 FAX 516-654-4935

367

Because Immediate Action Is The Best Remedy.

An Equal Opportunity Employer



Grumman - Calverton

Fire Training Area

Prepared by:

MPC Environmental Services
January 7, 1991

P.O. Box 610
460 Edwards Avenue, Calverton, NY 11933
516-369-4900 FAX 516-369-4909

368
An Equal Opportunity Employer

Background

Subsurface investigation of the Fire Training area at the Calverton plant began as early as 1982 (Figure 1). The area was previously used as a training facility for combating fires fed by various fuels used in the aviation industry. MPC Environmental Services initially installed twelve monitoring wells, 1 through 12, to determine if there was floating product on the water table as a result of these activities. It was apparent that while extinguishing the burning fuels, which were contained in the pit, the volume of water and/or foam required to extinguish the fire caused the pit to overflow. Nine of the initial twelve monitoring wells contained free floating product (wells 1, 2, 3, 6, 7, 8, 9, 10 and 12).

Due to the results of the initial investigation, the N.Y.S.D.E.C. required the installation of additional monitoring wells, to further define the extent of the free floating product plume. A copy of this letter from the N.Y.S.D.E.C., dated October 16, 1987, is found in the Appendix. On November 23, 1987, monitoring wells number 13 through 18 were installed by MPC Environmental Services (drill logs are in the Appendix).

WELL	TOP OF PIPE ELEVATION
1	101.87
2	100.78
3	100.72
4	103.10
5	101.78
6	100.78
7	101.73
8	102.32
9	100.39
10	102.32
11	107.74
12	103.32
13	100.01
14	103.92
15	103.38
16	104.84
17	101.29
18	100.00

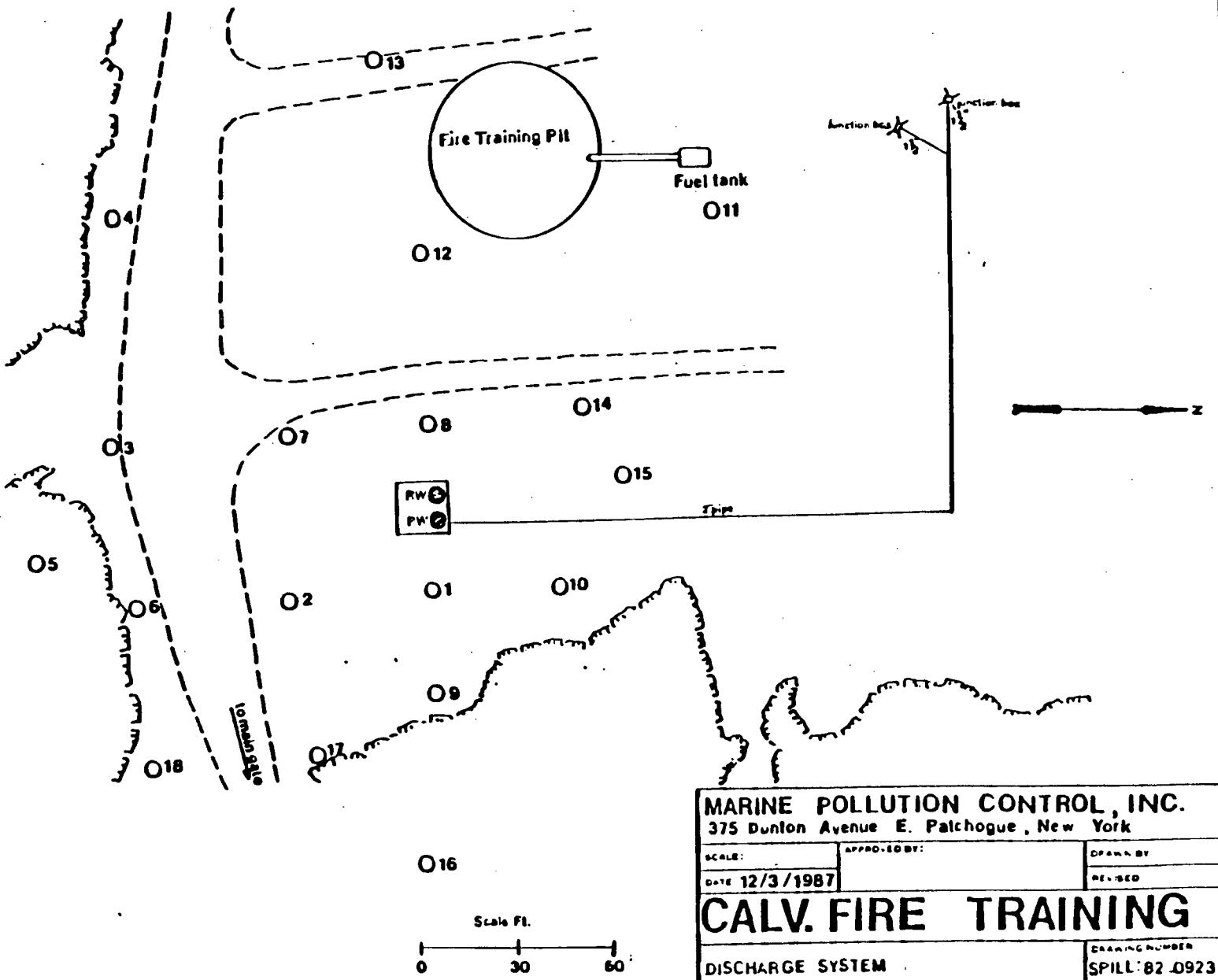


FIGURE 1

The information collected from all eighteen wells provided enough data to determine the groundwater flow direction, and the selection for both pumping and recovery well locations. A letter describing the background work, dated December 11, 1987, from MPC to Grumman Aerospace is found in the Appendix.

In December of 1987 work began on construction of the recovery system, which consisted of a pumping well utilizing a submersible pump. A separate recovery well was also installed, with a filter scavenger pump to collect the free floating product. Both these wells are four inches in diameter.

Discussion

During 1990 the average pumping rate of the recovery well was 34 gallons per minute (Figure 2). The total amount of product recovered to date is 216.45 gallons. According to weekly monitoring data, from monitoring sheets found in the Appendix, several wells continue to show free floating product. Table 1 is a summary of product thicknesses for 1990. According to this data, well number 1 had free product detected on every visit to the site, except for July 5 when water levels quickly rose. The product thickness ranged from 0.02 feet to a maximum of 0.51 feet on January 16.

WELL	TOP OF PIPE ELEVATION
1	101.87
2	100.78
3	100.72
4	103.10
5	101.78
6	100.78
7	101.73
8	102.32
9	100.39
10	102.32
11	107.74
12	103.32
13	100.01
14	103.02
15	103.28
16	104.84
17	101.29
18	100.00

372

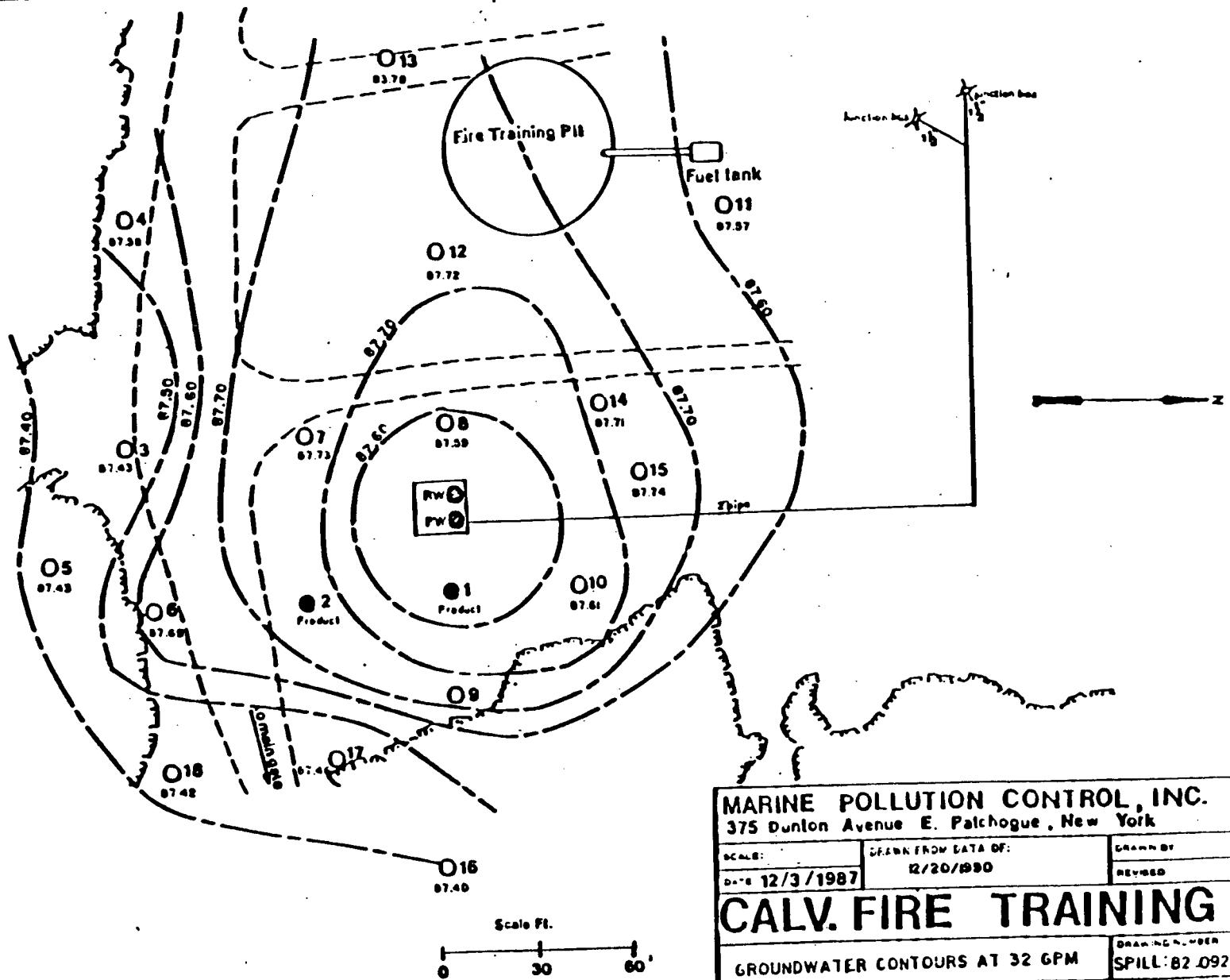


FIGURE 2.

Table 1.
Free Floating Product Thicknesses in Monitoring Wells,

Calculated in Feet for 1990

Date	#1	#2	#3	#7	#8	#9	#10	#12	#13	#15
01/04	0.25	0.00	0.06	0.06	T	0.00	0.47	0.00	T	0.00
01/08	0.16	0.00	0.01	T	T	0.00	0.30	0.00	T	0.00
01/16	0.51	0.00	0.16	0.03	0.04	0.38	0.00	0.00	0.00	0.00
01/23	0.05	0.00	0.04	T	T	0.02	0.06	0.00	0.00	0.00
01/31	0.43	0.00	0.13	T	T	0.08	0.25	0.00	0.00	0.00
02/07	0.35	0.00	T	T	T	T	0.20	0.00	0.00	0.00
02/14	0.09	0.00	0.00	0.10	0.03	T	0.97	0.00	T	0.00
02/23	0.15	0.00	0.00	0.15	T	0.00	0.29	0.00	0.00	0.00
02/27	0.06	0.00	0.00	0.07	T	0.00	0.17	0.00	0.00	0.00
03/05	0.08	0.00	0.00	0.09	T	0.00	0.18	0.00	T	0.00
03/15	0.14	0.00	0.00	0.10	0.04	0.00	0.16	0.00	0.00	0.00
03/23	0.10	0.00	0.00	T	0.00	T	0.08	0.00	0.00	0.00
03/29	0.05	0.00	0.95	T	T	0.00	0.09	0.00	0.00	0.00
04/05	0.02	0.00	0.02	T	T	T	0.02	0.00	T	0.00
04/12	0.05	0.00	0.05	0.06	T	0.00	0.12	0.00	0.00	T
04/17	0.40	T	0.03	0.15	0.01	0.00	0.11	0.00	0.00	T
04/25	0.21	T	T	0.17	T	0.00	0.18	0.00	0.00	T
05/02	0.12	0.00	0.00	0.12	0.00	0.00	0.15	0.00	0.00	0.00
05/10	0.21	0.01	0.00	0.15	0.01	0.00	0.09	0.00	0.00	0.00
05/17	0.14	0.00	0.00	0.098	T	0.00	0.19	0.00	0.00	0.00

T = Trace

Table 1.. (Continued)

Free Floating Product Thicknesses in Monitoring Wells,

Calculated in Feet for 1990

Date	#1	#2	#3	#7	#8	#9	#10	#12	#13	#15
05/24	0.21	T	0.00	T	0.05	0.00	0.09	0.00	0.00	0.00
06/01	0.31	T	0.00	0.14	0.00	0.00	0.21	T	0.00	0.00
06/07	0.13	T	0.00	0.00	T	0.00	0.04	0.00	0.00	0.00
06/13	0.14	0.01	0.00	0.19	0.01	0.00	0.09	0.00	0.00	0.00
06/21	0.14	0.00	0.00	0.08	T	0.00	0.15	0.00	0.00	0.00
06/29	0.13	0.00	0.00	0.04	0.00	0.00	0.20	0.00	0.00	0.00
07/05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07/13	0.40	0.00	0.06	0.02	T	0.00	0.30	0.00	0.00	0.00
07/20	0.13	0.00	0.10	0.04	T	T	0.10	0.00	0.00	0.00
07/27	0.38	0.00	0.15	T	T	0.04	0.06	0.00	0.00	0.00
08/03	0.06	T	0.26	0.08	T	0.11	T	0.00	0.00	0.00
08/10	0.03	T	0.12	T	T	0.26	0.01	0.00	0.00	0.00
08/16	0.42	0.02	0.12	0.01	0.02	0.17	0.02	0.00	0.00	0.00
08/23	0.23	T	0.09	T	T	0.13	0.05	0.00	0.00	0.00
08/31	0.31	T	0.11	T	T	0.20	0.12	T	0.00	0.00
09/05	0.25	0.05	0.07	T	0.00	0.15	0.30	T	0.00	T
09/14	0.18	T	T	T	0.00	0.05	0.16	0.00	0.00	0.00

T = Trace

Table 1. (Continued)
 Free Floating Product Thicknesses in Monitoring Wells.

Date	#1	#2	#3	#7	#8	#9	#10	#12	#13	#15
09/21	0.15	0.05	T	T	0.00	0.07	0.13	0.00	0.00	0.00
09/27	0.10	0.07	T	T	0.00	0.08	0.15	0.00	0.00	0.00
10/04	0.18	0.05	T	T	T	0.10	0.09	0.00	0.00	0.00
10/11	0.15	0.05	T	T	0.00	0.07	T	0.00	0.00	0.00
10/18	0.25	T	T	T	T	0.07	T	0.00	0.00	0.00
10/24	0.20	0.15	T	0.10	0.00	T	T	0.00	0.00	0.00
11/01	0.19	0.21	0.07	0.16	0.01	0.07	0.00	0.01	0.00	0.00
11/14	0.35	0.30	T	0.10	0.00	T	T	0.00	0.00	0.00
11/17	0.20	0.18	0.11	0.13	0.00	T	T	0.00	0.00	0.00
11/20	0.20	0.08	0.01	0.02	T	T	T	T	T	0.00
11/28	0.39	0.27	0.08	T	0.00	0.08	T	0.00	0.00	0.00
12/07	0.28	0.15	T	T	T	T	T	0.00	T	0.00
12/13	0.33	0.42	0.08	T	0.00	T	T	0.00	0.00	0.00
12/20	0.44	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

T = Trace

Well number 2 had a product thickness which ranged from a trace to 0.42 feet on December 13. The product thickness for well number 3 ranged from a trace to a maximum of 0.95 feet on March 29, which may have been the result of a drop in water levels, or an inaccurate reading. In well number 7 product was detected on every visit except for July 5. The product thickness ranged from a trace to a maximum of 0.19 feet on June 13.

Free floating product in well number 8 ranged from a trace to a maximum of 0.05 feet on May 24. Well number 9 had a product thickness which ranged from a trace to a maximum of 0.26 feet on August 10. The highest recorded product thickness at the site was detected in well number 10. The product thickness ranged from a trace to a maximum of 0.97 feet, which may have been a result of rising water levels, or an inaccurate reading. Wells number 12, 13 and 15 showed primarily a trace of product during 1990.

Table 2 and Table 3 are summaries of BTX sampling data collected from the recovery system for 1989 and 1990, respectively. The actual lab reports are located in the Appendix. The 1990 data is for water discharge at the junction box (see Figure 1). The influent data for 1989 is from the well head of the pumping well, effluent is from the junction box. According to the data for 1989, low concentrations of discharge were detected on May 31, at 27.3 ppb. The data for 1990 indicates that BTX concentrations were below detectable limits.

Table 2.

BTX Influent and Effluent Discharge Samples in ppb for 1989

Date	BTX In (wellhead discharge)	BTX Out (discharge at box)
03/07	4.0	<1.0
05/31	---	27.3
06/22	<2.0	<2.0
07/19	<4.0	<4.0
05/16	<4.0	<4.0
11/16	---	<4.0
12/13	<4.0	<4.0

Table 3.

BTX Discharge Samples at Junction Box in ppb for 1990

Date	Discharge
01/31	<2.0
02/15	<2.0
07/27	<2.0
10/08	<4.0
10/30	<2.0
11/29	<2.0

Appendix

*Dear As Expected, Clean up
of Calverton Fire Training Area
Required.*

New York State Department of Environmental Conservation
Building 40, SUNY
Stony Brook, NY 11794

(516) 751-7725

Copy D. Russell E.J. Corru
T. Longfellow J. Giordano
E. Andre
D. Farrelly
C. Turner
T. Welsh
A. Hayes



October 16, 1987

Commissioner

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Ohlmann
Crumman Aerospace Corp.
Mail Stop B08/30
Bethpage, NY 11714

RE: Spill #82-1680 Fire Training Area at Calverton Plant

Dear Mr. Ohlmann:

This office has recently reviewed the monitoring data for the site wells at the above referenced area. Based on this data we request that you perform the following work:

1. Install additional monitoring wells to define the extent of the contamination. The present floating and dissolved product plumes do not appear to be completely defined. These monitoring wells should be 4-inch diameter PVC pipe with the bottom ten feet machine slotted to 0.02 of an inch and extending five feet into the groundwater. The locations of the wells will be determined by a representative of this office.
2. Develop a groundwater contour map for the spill area showing its relationship to the buildings in the area.
3. Install a continuously operating recovery system which depresses the water table and removes the fuel from the groundwater. This system should be capable of removing both floating and dissolved product.

If no response is received from you by November 2, 1987, this Department will perform the necessary work and seek reimbursement at a later date. Reimbursement will be sought in accordance with Article 12 of the NYS Navigation Law by the NYS Attorney General's Office.

Truly yours,

Walter J. Parish

Walter J. Parish
Assistant Sanitary Engineer

WJP:pn
CC: J. Licata
A. Santino, SCDHS

J. OHLMANN

OCT 20 1987

381

Director Environ. Protection

MARINE POLLUTION CONTROL, INC.

P.O. BOX 2220

EAST PATCHOGUE, N.Y. 11772

11 December 1987

Grumman Aerospace Corp.
Mail Stop 808/30
Bethpage, NY 11714
Attn: Mr. John Ohlmann

Dear Sir:

Now that the background work has been done for the recovery operations at both the Fire Training Area and the Fuel Calibration Area in Calverton we are ready to proceed with the installation of the recovery equipment.

This week the pumping wells will be installed in both locations and a pump test performed to determine the pumping rate necessary to establish a proper cone of depression at both locations. At the same time samples will be taken and sent in for BTX analysis. The construction of the wells will be of 4" PVC with 15 ft. of stainless steel well screen per well.

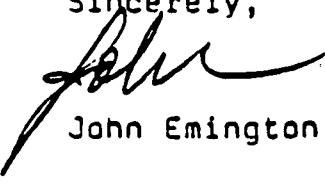
Immediately thereafter the recovery wells will be installed. The Fuel Cal area will have a 26" well installed along with a Filter Scavenger for product recovery in accordance with our previously submitted estimate. At the Fire Training area the depth to water prohibits us from installing a 26" casing to the proper depth. We are proposing to install a 4" well and equip it with a Groundwater Recovery Systems product only pump. The costs should be similar to the other location.

I will be on site during the well installation to discuss with Joe Welsch the discharge point for the water and the electric service.

Enclosed you will find site maps for both locations along with the groundwater contours and the proposed locations for the recovery operations.

Please feel free to call me if you have any questions.

Sincerely,


John Emington

SAMPLE/CORE LOG

Boring/Well 13, 4, 15 Project/No. 6, 17, 18

Site Location Fire Training

Drilling Started

11/23/87

Page _____ of _____

Drilling Completed

Total Depth Drilled _____ feet

Hole Diameter _____ inches

Type of Sample/
Coring Device

Return from Auger

Length and Diameter
of Coring Device

Sampling Interval _____ feet

Land-Surface Elev. _____ feet

Surveyed

Estimated

Datum _____

Drilling Fluid Used

Drilling Method Auger - Boom Truck

Drilling Contractor MPC

Driller Tim Moyer

Helper Karen Jackson

Prepared
By

John Goff

Hammer
Weight

Hammer
Drop _____ inches

Sample/Core Depth (feet below land surface)	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches
--	----------------------------	--

Sample/Core Description

From	To			
0	5'			Black fine sand
5'	10'			Brown fine sand
10'	20'			Brown fine sand
				(Total Pipe 25' stuck up <u>3' 6"</u>)
				Total Drilled 21' ✓

15	0	15'		light brown, fine sand	<u>No</u> <u>core</u>
				(Total Pipe <u>23' 6"</u> stuck up <u>2' 6"</u>)	<u>=</u> <u>21' 6"</u>
				Total Drilled <u>21' 6"</u>	<u>21' 6"</u>

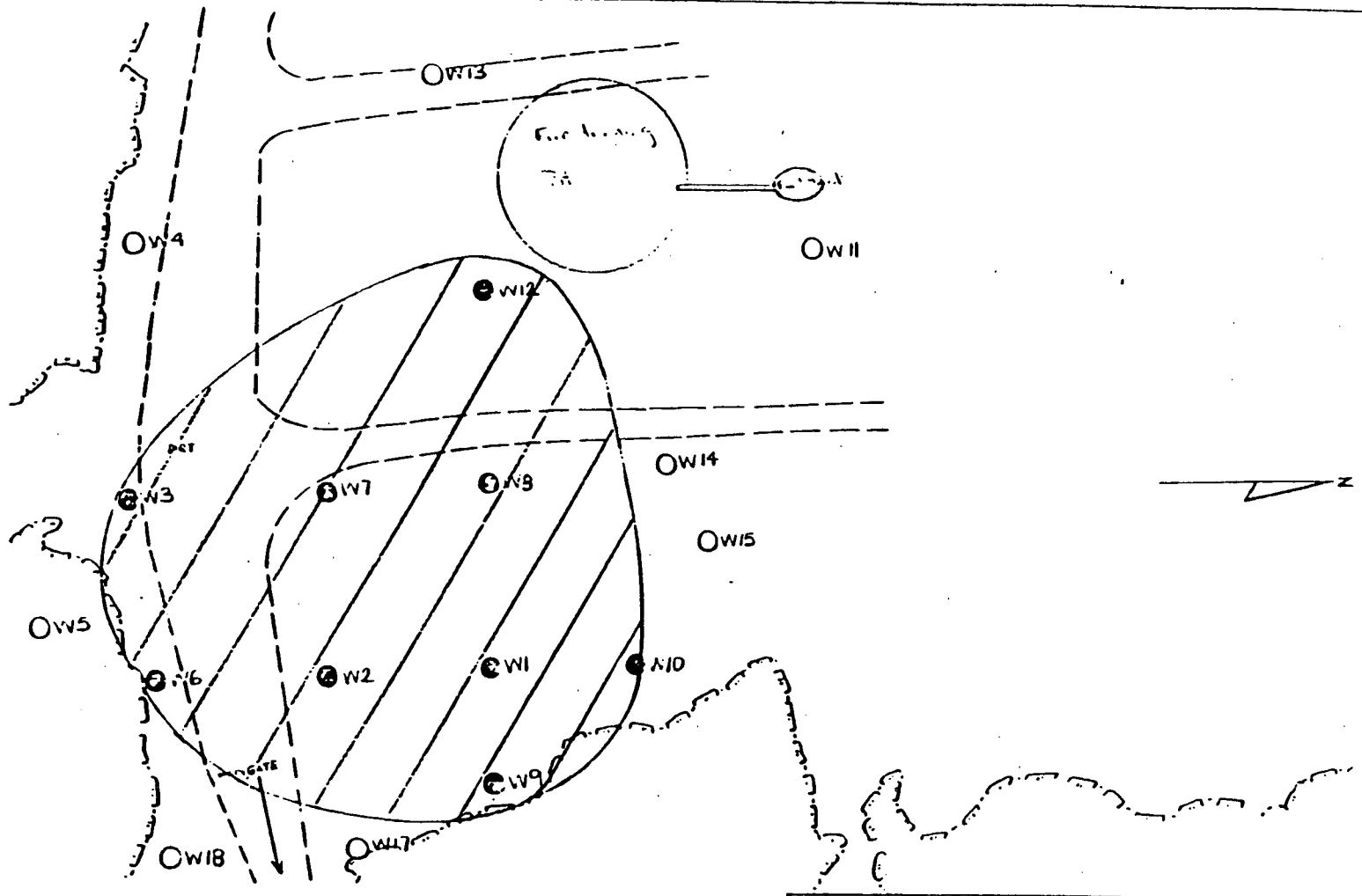
6	0	15'		light brown, fine sand	<u>No</u> <u>core</u>

7	0	15'		light brown, fine sand	<u>unknown</u> <u>core</u> @ 15'

8	0	15'		light brown, fine sand	<u>No</u> <u>core</u>

		16	17	18
Total Pipe		26'	21' 6"	21' 6"
Stuck up		2'	1' 6"	2'
Total Drilled		24'	20'	19' 6"
		383		

384

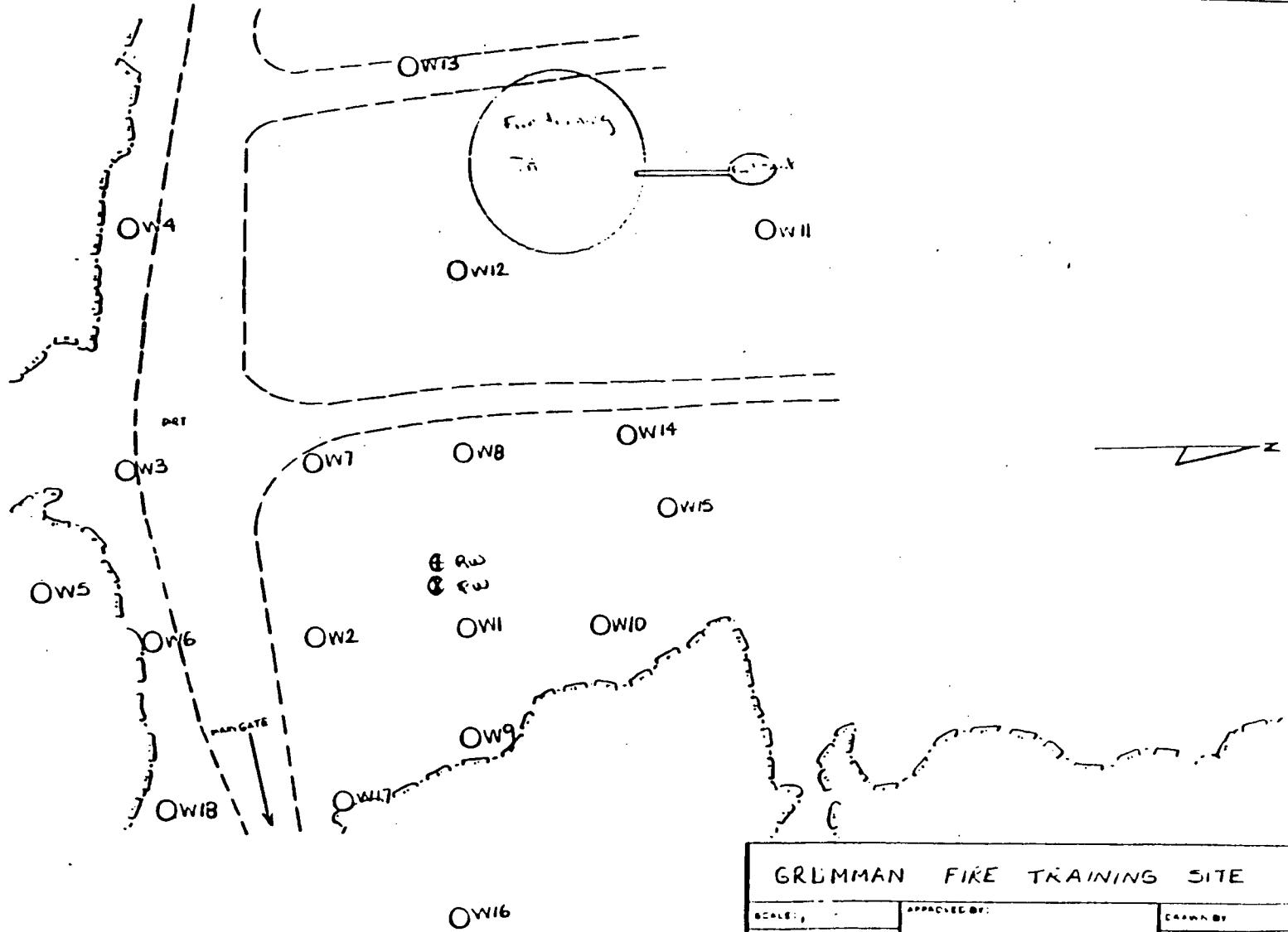


GRUMMAN FIRE TRAINING SITE		
SCALE	APPROVED BY:	DRAWN BY
DATE: 12/31/87		REVISED

PLUME

DRAWING NUMBER

385



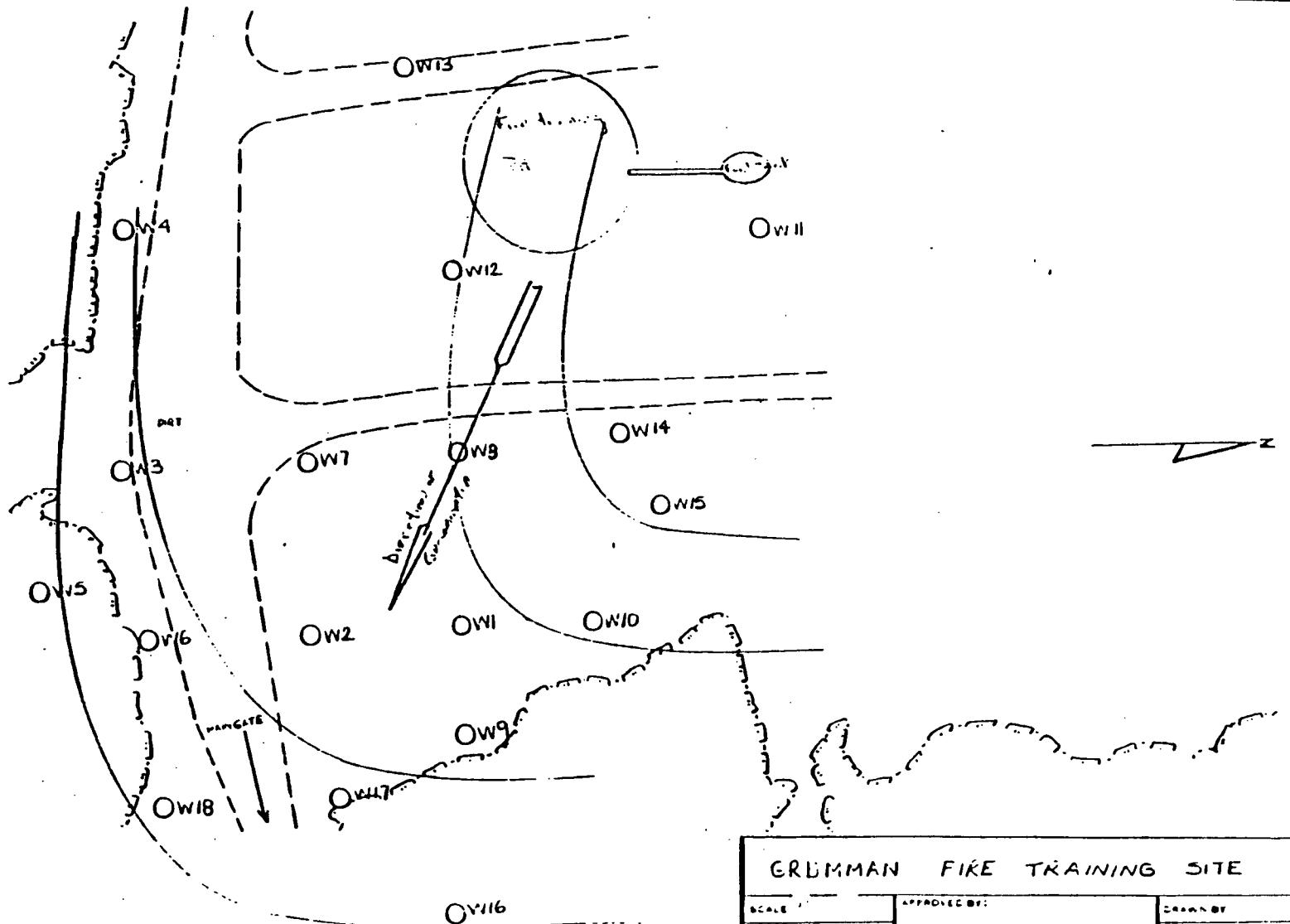
GRUMMAN FIRE TRAINING SITE

SCALE:	APPROVED BY:	DRAWN BY:
DATE: 12/13/87		REVISED

Proposed Recovery Wells

DRAWING NUMBER

386



GRUMMAN FIRE TRAINING SITE

SCALE	APPROVED BY:	ISSUED BY
1:2500		
DATE		REVISED
12/3/87		

Contours & Direction

DRAWING NUMBER



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahu. FIRE TRAINING SPILLS 82-0923 DATE 12/20/90 TIME 0900
STORAGE TANK LEVEL 1. 55.40 G. 2. _____
CUMULATIVE TOTAL 216.45 G. GALLONS BAILED 0.50 G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
					AFTER BAILED		
1	14.75	14.31	.44	1	14.37		
2	13.60	13.33	.27	2	13.37		
3	13.29			32			
4	15.52			33			
5	14.33			34			
6	13.10			35			
7	19.00			36			
8	14.73			37			
9	17.88			38			
10	14.71			39			
11	20.17			40			
12	15.60			41			
13	16.23			42			
14	16.21			43			
15	15.64			44			
16	17.44			45			
17	13.83			46			
18	12.58			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calv. FIRE TRAINING SPILL # 82-0933 DATE 13/13/90 TIME 0830
STORAGE TANK LEVEL 1 54.90 G. 2 _____
CUMULATIVE TOTAL 215.95 G. GALLONS BAILED 0.50 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER BAiL
1	14.62	14.29	.33	1	14.48		
2	13.69	13.27	.42	2	13.39		
3	13.33	13.25	.08	3	13.27		
4	15.54			33			
5	14.33			34			
6	13.10			35			
7	14.02	TRACE		36			
8	14.71			37			
9	17.88	TRACE		38			
10	19.69	TRACE		39			
11	20.13			40			
12	15.56			41			
13	16.21			42			
14	16.19			43			
15	15.64			44			
16	17.44			45			
17	13.83			46			
18	12.58			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Geummen Crv. Fire Ternin Acre SPILLS 82-0923 DATE 1/7/90 TIME 1100
STORAGE TANK LEVEL 1. 54.40 G. 2. _____
CUMULATIVE TOTAL 215.45 G. GALLONS BAILED 0.25 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER BAILED
1	14.50	14.00	0.08	1	14.29	14.25	0.01
2	13.40	13.25	0.15	2	13.29	13.28	0.01
3	13.00	TRACI		32			
4	15.50			33			
5	14.27			34			
6	13.05			35			
7	13.90	TRACI		36			
8	14.65	TRACI		37			
9	17.75	TRACI		38			
10	14.61	TRACI		39			
11	20.10			40			
12	15.50			41			
13	16.15	TRACI		42			
14	16.15			43			
15	15.60			44			
16	17.39			45			
17	13.77			46			
18	12.55			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION Calverton Fire Training SPILL # 82-0923 DATE 11/28/90 TIME 0900
STORAGE TANK LEVEL 1 54.2 G. 2
CUMULATIVE TOTAL 215.2 G. GALLONS BAILED 1.5 GAL

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	After	Bailed	
				29			
1	14.64	14.25	.39	1	14.39		
2	13.54	13.27	.27	2	13.35		
3	13.29	13.21	.08	3	13.27		
4	15.48			33			
5	14.29			34			
6	13.08			35			
7	14.00	TRACE		36			
8	14.64			37			
9	17.83	17.75	.08	9	17.79		
10	14.64	TRACE		39			
11	20.06			40			
12	15.52			41			
13	16.15			42			
14	16.15			43			
15	15.58			44			
16	17.39			45			
17	13.81			46			
18	12.54			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Calv. Fuel Tank SPILL 82-0923 DATE 11/20/80 TIME 1015

STORAGE TANK LEVEL 1. 52.7 G. 2.

CUMULATIVE TOTAL 213.7 G. GALLONS BAILED 0.20G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27	AFTER BAILED		
IW				28			
				29			
1	14.40	14.30	0.20	30	14.24	14.21	0.03
2	13.30	13.20	0.08	31	13.27	13.26	0.01
3	13.14	13.13	0.01	32			
4	15.41			33			
5	14.23			34			
6	13.00			35			
7	13.87	13.85	0.02	36			
8	14.60	TRACE		37			
9	17.70	TEN U		38			
10	14.55	TRACE		39			
11	20.00			40			
12	15.45	TRACE		41			
13	16.10	TRACE		42			
14	16.08			43			
15	15.55			44			
16	17.35			45			
17	13.75			46			
18	12.50			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calu Fire Training SPILL # 82-0923 DATE 11/7/92 TIME 0900
STORAGE TANK LEVEL 1. 5.2.00 2.
CUMULATIVE TOTAL 213 G. GALLONS BAILED 0.50 G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							After Bailed
1	14.30	14.10	.20	1	14.30		
2	13.33	13.15	.18	2	13.40		
3	13.11	13.00	.11	3	13.10		
4	15.32			33			
5	14.14			34			
6	12.91			35			
7	13.88	13.75	.13	7	13.90		
8	14.50			37			
9	17.65	trace		38			
10	14.45	trace		39			
11	19.92			40			
12	15.37			41			
13	16.00			42			
14	16.00			43			
15	15.42			44			
16	17.25			45			
17	13.65			46			
18	12.40			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: CALVERTON FIRE TRAINING SPILL 82-0923 DATE 11/14/90 TIME 0905STORAGE TANK LEVEL 1. 52.50 G.

2. _____

CUMULATIVE TOTAL 213.50 G.GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW					AFTER BAILED		
				29			
1.	14.50	14.15	.35	1	14.30		
2	13.50	13.20	.30	2	13.30		
3	13.15	TRACE		32			
4	15.40			33			
5	19.20			34			
6	13.00			35			
7	13.92	13.82	.10	7	13.80		
8	14.60			37			
9	17.75	TRACE		38			
10	14.55	TRACE		39			
11	19.97			40			
12	15.42			41			
13	16.06			42			
14	16.05			43			
15	15.50			44			
16	17.50			45			
17	13.72			46			
18	12.95			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: (Crummau) Calverton Fire Train

SPILL # 82-0973

DATE 11-1-90

TIME 1300

STORAGE TANK LEVEL 1 51.50G.

2

CUMULATIVE TOTAL 212.50G.

GALLONS BAILED 0.5G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	ca			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	11.09			26			
PW 2	-			27			
IW	-			28			
	-			29	AFTER	Bailing	
1	14.19	14.00	.19	1	14.08		
2	13.22	13.01	.21	2	13.14		
3	13.01	12.94	.07	3	13.02		
4	15.23			33			
5	14.04			34			
6	13.81			35			
7	13.81	13.65	.16	7	13.75		
8	14.41	14.40	.01	8	14.43		
9	17.53	17.52	.01	9	17.56		
10	14.42	14.35	.07	10	14.44		
11	19.83			40			
12	15.22	15.26	.01	12	15.30		
13	15.92			42			
14	15.89			43			
15	15.34			44			
16	17.13			45			
17	13.56			46			
18	12.29			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calv. Fire Training SPILLS 82-0923 DATE 10/24/90 TIME 1200

STORAGE TANK LEVEL: 51 G.

2.

CUMULATIVE TOTAL 212 G.

GALLONS BAILED 0.50 G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				29			After 139.1
1	14.10	13.90	.20	1	14.00		
2	13.10	12.95	.15	2	12.96		
3	12.87	TRACE		32			
4	15.15			33			
5	13.95			34			
6	12.70			35			
7	13.70	13.60	.10	7	13.60		
8	14.32			37			
9	17.45	TRACE		38			
10	14.30	TRACE		39			
11	19.76			40			
12	15.21			41			
13	15.85			42			
14	15.80			43			
15	15.25			44			
16	12.02			45			
17	13.45			46			
18	12.15			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Fire Training SPILLS 82-0923 DATE 10/18/90 TIME 0900
STORAGE TANK LEVEL 1 50.50 G. 2
CUMULATIVE TOTAL 211.50 G. GALLONS BAILED 0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER (BAI)
1	14.35	14.10	.25	1	14.20		
2	13.22	TRACE		31			
3	13.07	TRACE		32			
4	14.35			33			
5	14.15			34			
6	12.92			35			
7	13.80	TRACE		36			
8	14.55	TRACE		37			
9	17.70	17.63	.07	9	17.72		
10	14.52	TRACE		39			
11	19.95			40			
12	16.40			41			
13	16.02			42			
14	16.00			43			
15	15.43			44			
16	17.25			45			
17	13.66			46			
18	13.90			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Firetrain SPILL # 52-0935 DATE 10/11/90 TIME 0830
STORAGE TANK LEVEL 1 50.25 2. _____
CUMULATIVE TOTAL 211.25 GALLONS BAILED 0.25G

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							After Bail
1	14.30	14.15	.15	1	14.20		
2	13.25	13.20	.05	2	13.20		
3	13.15	Trace		32			
4	15.35			33			
5	14.18			34			
6	12.95			35			
7	13.82	Trace		36			
8	14.55			37			
9	17.72	17.65	.07	9	17.68		
10	14.52	Trace		39			
11	14.95			40			
12	16.41			41			
13	16.03			42			
14	16.00			43			
15	15.46			44			
16	17.27			45			
17	13.68			46			
18	12.42			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Caln Fire Training SPILL #2-0923 DATE 10/4/90 TIME 0800
STORAGE TANK LEVEL 1: 506. 2. _____
CUMULATIVE TOTAL 2116 GALLONS BAILED 0.30

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER Bail
1	14.25	14.07	.18	1	14.15		
2	13.17	13.12	.05	2	13.15		
3	130.3	TRACE		32			
4	15.28			33			
5	14.05			34			
6	12.98			35			
7	13.77	TRACE		36			
8	14.48	TRACE		37			
9	17.70	17.60	.10	9	17.65		
10	14.54	14.45	.09	10	14.45		
11	19.88			40			
12	15.35			41			
13	15.96			42			
14	15.95			43			
15	15.40			44			
16	17.22			45			
17	13.62			46			
18	12.31			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahertan Fire Training SPILLS 82-0923 DATE 9/27/90 TIME 0905

STORAGE TANK LEVEL 1 48,75 G.

2

CUMULATIVE TOTAL 209,75 G.

GALLONS BAILED 0,25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AKTER Bail
1	14.12	14.02	.10	1	14.05		
2	13.10	13.03	.07	2	13.06		
3	12.96	Trace		32			
4	15.20			33			
5	14.03			34			
6	12.81			35			
7	13.65	Trace		36			
8	14.40			37			
9	17.60	17.52	.08	9	17.56		
10	14.50	14.35	.15	10	14.38		
11	19.80			40			
12	15.27			41			
13	15.85			42			
14	15.88			43			
15	15.33			44			
16	17.12			45			
17	13.54			46			
18	12.30			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fire Training SPILL #2-0923 DATE 9/21/90 TIME 0900
STORAGE TANK LEVEL 1 48.5 G. 2 _____
CUMULATIVE TOTAL 209.5 G. GALLONS BAILED 0.5

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2							AFTER BAII
IW				28			
				29			
1	14.13	13.98	.15	1	14.02		
2	13.05	13.00	.05	2	13.02		
3	12.93	TRACE		32			
4	15.14			33			
5	13.99			34			
6	12.76			35			
7	13.62	TRACE		36			
8	14.35			37			
9	17.55	17.48	.07	9	17.50		
10	14.44	14.31	.13	10	14.92		
11	19.75			40			
12	15.22			41			
13	15.83			42			
14	15.83			43			
15	15.28			44			
16	17.10			45			
17	13.51			46			
18	12.25			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fire Training SPILLS 82-0923 DATE 9/14/90 TIME 0830
STORAGE TANK LEVEL 1. 486. 2
CUMULATIVE TOTAL 2096. GALLONS BAILED 16.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW							
							AFTER BALED
1	14.10	13.92	.18	1	14.10		
2	12.98	TRACE		31			
3	12.87	TRACE		32			
4	15.09			33			
5	13.93			34			
6	12.72			35			
7	13.56	TRACE		36			
8	14.29			37			
9	17.50	17.45	.05	9	12.46		
10	14.42	14.26	.16	10	18.39		
11	19.68			40			
12	15.15			41			
13	15.75			42			
14	15.77			43			
15	15.72			44			
16	17.05			45			
17	13.48			46			
18	12.22			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cal U Fire Training SPILL # 82-0923 DATE 9/15/90 TIME 0900
STORAGE TANK LEVEL 1. 47 G. 2.
CUMULATIVE TOTAL 208 G. GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27	After Bailed		
IW				28			
				29			
1	14.03	13.28	.25	1	13.85	13.80	.05
2	12.85	12.80	.05	2	12.85	TRACE	
3	12.75	12.68	.07	3	12.75	TRACE	
4	14.93			33			
5	12.80			34			
6	12.58			35			
7	13.40	TRACE		36			
8	14.15			37			
9	17.45	17.30	.15	9	17.31	17.30	.01
10	14.40	14.10	.30	10	14.11	14.10	.01
11	19.52			40			
12	15.00	TRACE		41			
13	15.60			42			
14	15.62			43			
15	15.06	TRACE		44			
16	16.90			45			
17	13.32			46			
18	12.06			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CALVERTON - FIRE TRAINING SPILLS 82-0923 DATE 5/31/90 TIME 8:30
STORAGE TANK LEVEL 1 47 G. 2
CUMULATIVE TOTAL 208 G. GALLONS BAILED 0.60

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	13.98	13.79	0.19	22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	10.84			26			
PW 2				27			
IW				28			
				29			
1	13.94	13.63	0.31	1	13.75	TRACE	
2	12.71	TRACE		31			
3	12.67	12.56	0.11	3	12.61	TRACE	
4	14.83			33			
5	13.69			34			
6	12.46			35			
7	13.32	TRACE		36			
8	14.03	TRACE		37			
9	17.35	17.15	0.20	9	17.22	TRACE	
10	14.11	13.99	0.12	10	14.03	TRACE	
11	19.43			40			
12	14.86	TRACE		41			
13	15.50			42			
14	15.57			43			
15	14.97			44			
16	16.81			45			
17	13.32			46			
18	11.47			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fuel training

SPILLS 82-0923

DATE 8/23/90

TIME 09:30

STORAGE TANK LEVEL 1

116 G.

2

CUMULATIVE TOTAL

207 G.

GALLONS BAILED

0.60

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	After	Bailed	
				29			
1	19.76	13.53	.23	1	13.57	Trace	
2	12.6	Trace		31			
3	19.56	12.47	.09	3	12.48	Trace	
4	14.74			33			
5	13.6			34			
6	12.37			35			
7	13.21	Trace		36			
8	13.93	Trace		37			
9	17.19	17.06	.13	9	17.09	Trace	
10	13.95	13.9	.05	10	13.92		
11	19.93			40			
12	14.77			41			
13	15.4			42			
14	15.49			43			
15	14.87			44			
16	16.72			45			
17	19.19			46			
18	11.87			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Contracting Inc - Training SPILLS 22-0901 DATE 2-12-90 TIME 12:00

STORAGE TANK LEVEL 1 46 G. 2.

CUMULATIVE TOTAL 207 G. GALLONS BAILED 1 GAL.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	cn			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29	117.1	13.50	Bailing
1	13.82	13.40	.42	1	13.50	13.40	.02
2	12.49	12.17	.02	2	12.54		
3	12.16	12.34	.12	3	12.42		
4	14.62			33			
5	12.47			34			
6	11.00			35			
7	13.10	12.79	.01	7	13.14		
8	13.82	13.80	.02	8	13.86		
9	17.11	16.94	.17	9	17.02		
10	13.79	13.72	.02	10	13.85		
11	19.30			40			
12	14.67			41			
13	15.29			42			
14	15.30			43			
15	14.25			44			
16	16.60			45			
17	15.00			46			
18	11.76			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Firetraining - Calverton SPILLS 82-0923 DATE 8/9/90 TIME 0900
STORAGE TANK LEVEL 1 45 G. 2
CUMULATIVE TOTAL 2.06 G. GALLONS BAILED 0.75

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1.				26			
PW 2				27			
IW				28	After Bailed		
				29			
1	13.7	13.4	.03	1.	13.45	Trace	
2	12.47	Trace		31			
3	12.45	12.39	.12	3.	12.3	Trace	
4	13.6			33			
5	13.47			34			
6	12.25			35			
7	13.08	Trace		36			
8	13.8	Trace		37			
9	17.2	16.94	.26	9.	16.98	Trace	
10	13.79	13.78	.01	10.	13.78		
11	19.2			40			
12	14.61			41			
13	15.26			42			
14	15.29			43			
15	14.75			44			
16	16.6			45			
17	13.01			46			
18	11.75			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CALVERTON FIRE TRAINING SPILLS 82-0923 DATE 8/3/93 TIME 9:45
STORAGE TANK LEVEL 1 446. 2 _____
CUMULATIVE TOTAL 2056. GALLONS BAILED 0.506

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	AFTER BAILING		
				29			
1	13.89	13.29	0.60	1	13.28	TRACE	
2	12.38	TRACE		31			
3	12.47	12.21	0.26	3	12.24	TRACE	
4	14.49			33			
5	13.37			34			
6	12.17			35			
7	13.05	12.97	0.08	7	12.48	TRACE	
8	13.71	TRACE		37			
9	16.96	16.85	0.11	9	16.86	TRACE	
10	13.68	TRACE		39			
11	19.06			40			
12	14.51			41			
13	15.14			42			
14	15.18			43			
15	14.63			44			
16	16.51			45			
17	12.92			46			
18	11.67			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Colberton Firetraining SPILL # 82-0929 DATE 7/27/90 TIME 1000
STORAGE TANK LEVEL 1 44G.0 2 205G.
CUMULATIVE TOTAL 0.50 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	After Bailed		
				29			
1	13.6	19.22	.38	1	13.25	Trace	
2	12.29			31			
3	12.3	12.15	.15	32	12.04	Trace	
4	14.41			33			
5	19.29			34			
6	12.05			35			
7	12.9	Trace		36			
8	19.6	Trace		37			
9	16.80	16.78	.04	9	16.78	Trace	
10	13.65	13.59	.06	10	13.59		
11	18.98			40			
12	14.45			41			
13	15.06			42			
14	18.09			43			
15	14.55			44			
16	16.41			45			
17	12.82			46			
18	11.57			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fire training SPILLS 83-0923 DATE 7/10/92 TIME .09.90
STORAGE TANK LEVEL 1 44G. 2 CUMULATIVE TOTAL 205G. GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	After Bailed		
				29			
1	19.26	13.13	13	1.	13.17	Trace	
2	12.2			2.			
3	12.15	12.05	10	3.	12.06		
4	14.9			33			
5	19.2			34			
6	12			35			
7	12.82	12.78	04	7.	12.84		
8	13.51	Trace		37			
9	16.69	Trace		38			
10	19.58	13.48	10	10.	13.78	Trace	
11	18.87			40			
12	14.34			41			
13	14.94			42			
14	15.			43			
15	14.45			44			
16	16.34			45.			
17	12.73			46			
18	11.48			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fire training SPILLS 82-0929 DATE 7/23/90 TIME 10.30
STORAGE TANK LEVEL 1 4-3 G. 2 _____
CUMULATIVE TOTAL 204 G. GALLONS BAILED 0.40

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	After Bailed		
				29			
1	13.46	13.06	.40	1.	13.01	Trace	
2	12.12			31			
3	12.	11.94	.06	3.	11.99		
4	14.22			33			
5	19.11			34			
6	11.99			35			
7	12.71	12.69	.02	7.	19.68	Trace	
8	19.49	Trace		37			
9	16.61			38			
10	19.68	19.38	.30	10.	13.38		
11	18.79			40			
12	19.25			41			
13	19.89			42			
14	19.91			43			
15	19.37			44			
16	16.84			45			
17	12.64			46			
18	11.95			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Firetraining SPILL# 82-0923 DATE 7/5/90 TIME 0830
STORAGE TANK LEVEL 1 043G 2 _____
CUMULATIVE TOTAL 204G GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	12.77			30			
2	11.83			31			
3	11.76			32			
4	13.99			33			
5	12.87			34			
6	11.64			35			
7	12.42			36			
8	13.15			37			
9	16.34			38			
10	13.12			39			
11	18.59			40			
12	13.99			41			
13	14.64			42			
14	19.65			43			
15	14.12			44			
16	16.00			45			
17	12.39			46			
18	11.15			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Huntington SPILLS 82-0923 DATE 6/29/90 TIME 10:30
STORAGE TANK LEVEL 1 43 G. 2.
CUMULATIVE TOTAL 204 G. GALLONS BAILED 0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			<u>After Bailed</u>
IW				28			
				29			
1	13.06	12.93	.13	1.	12.94	Trace	
2	11.98			31			
3	11.84			32			
4	14.07			33			
5	12.99			34			
6	11.78			35			
7	12.60	12.56	.04	2.	12.57	Trace	
8	13.29			37			
9	16.49			38			
10	13.46	13.36	.90	10.	13.27	Trace	
11	19.64			40			
12	14.09			41			
13	14.71			42			
14	14.77			43			
15	14.24			44			
16	16.13			45			
17	12.63			46			
18	11.27			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 634-4900

LOCATION: Fire training SPILL # 82-092-3 DATE 6/21/90 TIME 1000
STORAGE TANK LEVEL 1 042 G 2
CUMULATIVE TOTAL 203 G GALLONS BAILED 0.40

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
RW				28	AFTER BAILED		
				29			
1	12.92	12.78	.14	1.	12.79	Trace	
2	11.82			31			
3	11.7			32			
4	12.9			33			
5	12.83			34			
6	11.63			35			
7	12.48	12.4	.08	7.	12.4	Trace	
8	13.13	Trace		37			
9	16.3			38			
10	13.25	13.1	.15	10.	13.11	Trace	
11	18.5			40			
12	19.94			41			
13	14.56			42			
14	14.61			43			
15	14.07			44			
16	15.97			45			
17	12.37			46			
18	11.11			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: General Contractors Inc. tank SPILLS B2-C7-L3 DATE 6-13-70 TIME 1000

STORAGE TANK LEVEL 1 42 G. 2

CUMULATIVE TOTAL 203G GALLONS BAILED 0.30

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	9.59			26			
PW 2	-			27			
IW	-			28			
	-			29	11-Ton	13.716	
1	12.85	12.71	.14	30	1	12.71	
2	11.77	11.76	.51	32	2	11.79	
3	11.63			33	-		
4	12.82			34	-		
5	12.71			35	-		
6	11.71			36			
7	12.72	12.33	.19	37	12.43	12.41	
8	13.07	13.06	.01	38	13.07		
9	14.07			39	-		
10	13.14	13.04	.09	40	-		
11	17.42			41			
12	13.77			42			
13	14.50			43			
14	14.35			44			
15	14.02			45			
16	13.71			46			
17	12.20			47			
18	11.06			48			
19				49			
20				50			
21							



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Firetraining - Calverton

SPILLS 82-0929

DATE 6/7/90

TIME 08:30

STORAGE TANK LEVEL 1

42G

2

CUMULATIVE TOTAL

203G

GALLONS BAILED

0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	13.14	19.01	.23	30	13.01	Trace	
2	11.72	Tim		31			
3	11.61			32			
4	19.83			33			
5	12.79			34			
6	11.5			35			
7	12.44	12.29	.15	36	12.3		
8	13.05	Trace		37			
9	16.24			38			
10	12.72	12.68	.04	39	13.01		
11	18.41			40			
12	13.89			41			
13	14.49			42			
14	14.59			43			
15	19.99			44			
16	15.88			45			
17	12.87			46			
18	10.97			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Livetraining -SPILLS 82-0923DATE 6/1/90TIME 1000STORAGE TANK LEVEL 1 42 G.

2.

CUMULATIVE TOTAL 203 G.GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1-	13.01	12.7	.31	1.	12.79	Trace	
2	11.75	Trace		31			
3	11.64			32			
4	19.87			33			
5	12.75			34			
6	11.53			35			
7	12.46	12.32	.14	7	12.34		
8	13.07			37			
9	16.25			38			
10	13.25	19.04	.21	10.	19.06	Trace	
11	18.46			40			
12	13.93	Trace		41			
13	14.56			42			
14	14.56			43			
15	14.02			44			
16	15.89			45			
17	12.28			46			
18	11.03			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Only Fire Train Area SPILLS FD-0923

DATE 5-24-90 TIME 08:

STORAGE TANK LEVEL 1 14-1 G.

2.

CUMULATIVE TOTAL 2.02 G.

GALLONS BAILED 0.30

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27	AFTER BAILE A		
IW				28			
				29			
1.	13.00	12.79	0.21	1	12.83	TRACE	
2	11.85	SLIGHT TENCE		31			
3	11.76			32			
4	13.95			33			
5	12.85			34			
6	11.62			35			
7	12.42	TRACE		36			
8	13.20	13.15	0.05	37	13.17	TRACE	
9	16.35			38			
10	13.20	13.11	0.09	39	13.30	TRACE	
11	18.55			40			
12	14.08			41			
13	14.60			42			
14	14.67			43			
15	14.10			44			
16	16.01			45			
17	12.39			46			
18	11.15			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Hiretaining SPILLS 82-0922 DATE 5/17/90 TIME 1200
STORAGE TANK LEVEL 1 0:41 G. 2 _____
CUMULATIVE TOTAL 202 G GALLONS BAILED 0.40

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	AFTER BAILING		
				29			
1	12.95	12.81	.14	1	12.83	Trace	
2	11.87			31			
3	11.74			32			
4	13.96			33			
5	12.85			34			
6	11.68			35			
7	12.53	12.44	.09	6	12.5		
8	13.17	Trace		37			
9	16.37			38			
10	13.34	13.15	.19	10	13.18	Trace	
11	18.51			40			
12	14.			41			
13	14.62			42			
14	14.67			43			
15	14.14			44			
16	16.			45			
17	12.39			46			
18	11.1			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gullmar/Calvertta Fire Trial SPILL # 82-0923 DATE 5-10-90 TIME 0900
STORAGE TANK LEVEL 1 4-1 G. 2.
CUMULATIVE TOTAL 202 G. GALLONS BAILED 0.50 GA

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	CJ			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	9.79			26			
PW 2	-			27			
IW	-			28			
	-			29			
1	13.08	12.87	.21		1	12.93	AFTER Bailing
2	11.92	11.91	.01		2	11.94	TRAC P
3	11.78			32			
4	13.99			33			
5	12.91			34			
6	11.70			35			
7	12.62	12.47	.15		7	12.61	
8	13.22	13.21	.01		8	13.25	
9	16.41			38			
10	13.27	13.18	.09		10	13.03	13.02 .01
11	18.56			40			
12	14.02			41			
13	14.64			42			
14	14.70			43			
15	14.08			44			
16	16.06			45			
17	12.46			46			
18	11.21			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gilberton - Fire training SPILL # 82-0723 DATE 5/2/90 TIME 0045
STORAGE TANK LEVEL 1. 40 G 2.
CUMULATIVE TOTAL 2016. GALLONS BAILED .40

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	<u>12.54</u>			26			
PW 2				27			
IW				28			
				29			
1-	<u>12.98</u>	<u>12.86</u>	<u>.12</u>	1.	<u>12.87</u>		
2	<u>11.9</u>			31			
3	<u>11.77</u>			32			
4	<u>13.99</u>			33			
5	<u>12.9</u>			34			
6	<u>11.68</u>			35			
7	<u>12.58</u>	<u>12.46</u>	<u>.12</u>	7.	<u>12.48</u>		
8	<u>13.2</u>			37			
9	<u>16.4</u>			38			
10	<u>13.92</u>	<u>13.17</u>	<u>.15</u>	10.	<u>13.2</u>	<u>Tone</u>	
11	<u>18.56</u>			40			
12	<u>14.04</u>			41			
13	<u>14.41</u>			42			
14	<u>14.69</u>			43			
15	<u>14.15</u>			44			
16	<u>16.05</u>			45			
17	<u>12.44</u>			46			
18	<u>11.19</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Firetraining SPILLS 82-0923 DATE 4/25/90 TIME 1000
STORAGE TANK LEVEL 1. 40 G 2.
CUMULATIVE TOTAL 201 G. GALLONS BAILED 0.40

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	<i>Bain</i>			26			
PW 2				27			
IW				28			
				29			
1	19.02	12.81	.21	30	12.9	Trace	
2	11.87	Trace		31			
3	11.75	Trace		32			
4	13.98			33			
5	12.87			34			
6	11.63			35			
7	12.62	12.45	.17	36	12.54		
8	13.19	Trace		37			
9	16.36			38			
10	13.32	13.14	.18	39	13.2	Trace	
11	18.56			40			
12	14.04			41			
13	14.42			42			
14	14.67			43			
15	14.19	Trace		44			
16	16.			45			
17	12.4			46			
18	11.13			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Garrison Collected Tire Tires SPILL # OT25 DATE 1/17/90 TIME 1200
STORAGE TANK LEVEL 1 40 6. 2 2
CUMULATIVE TOTAL 201 6. GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	m			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	9.79			26			
PW 2				27			
IW				28			
				29	1-1/2" After Bailing		
1	13.26	12.76	.40	30	12.71		
2	11.95	Trace		31			
3	11.83	11.80	.03	32	11.82		
4	14.05			33			
5	12.72			34			
6	11.69			35			
7	12.65	12.50	.15	36	12.55		
8	13.27	12.26	.01	37			
9	16.47			38			
10	15.82	13.81	.11	39	13.27		
11	18.64			40			
12	14.87			41			
13	14.47			42			
14	14.74			43			
15	14.10	Trace		44			
16	16.02			45			
17	12.43			46			
18	11.17			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Caberton Firetraining SPILLS 82-0923 DATE 4/12/90 TIME 1030
STORAGE TANK LEVEL 1 3.95 2
CUMULATIVE TOTAL 2.006 GALLONS BAILED 0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	13.05	13.	.05	1	19.05		
2	12.05			31			
3	11.97	11.92	.05	3	10.98		
4	14.18			33			
5	13.04			34			
6	11.82			35			
7	12.7	12.64	.06	7	12.64	Trace	
8	12.37	Trace		37			
9	16.54			38			
10	19.46	13.34	.19	10	13.37		
11	18.77			40			
12	14.22			41			
13	14.82			42			
14	14.87			43			
15	14.31	Trace		44			
16	16.16			45			
17	12.57			46			
18	11.3			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CIV Geummow Fire Train Area SPILL # 82-05-3 DATE 4-5-90 TIME 1200
STORAGE TANK LEVEL 1 396 2 2006
CUMULATIVE TOTAL GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	13.04	13.02	0.02	30			
2	12.10			31			
3	11.97	11.95	0.02	32			
4	14.24			33			
5	13.10			34			
6	12.90			35			
7	12.69	TRACE		36			
8	13.42	TRACE		37			
9	16.57	TRACE		38			
10	13.42	13.40		39			
11	17.42			40			
12	14.27	TRACE		41			
13	14.87			42			
14	14.95			43			
15	14.37			44			
16	16.25			45			
17	12.60			46			
18	11.35			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Huntington SPILLS 82-0923 DATE 3/19/90 TIME 1900
STORAGE TANK LEVEL 1 39 GAL. 2 _____
CUMULATIVE TOTAL 200 G GALLONS BAILED 0.03

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	12.83			26			
PW 2				-27			
IW				28			
				29			
1	13.21	19.16	.05	1	19.17	Trace	
2	12.21			31			
3	13.02	12.07	.95	3	12.07		
4	14.9			33			
5	13.21			34			
6	11.98			35			
7	12.8	Trace		36			
8	13.52	Trace		37			
9	16.72			38			
10	13.6	13.51	.09	10	13.52	Trace	
11	18.9			40			
12	14.36			41			
13	14.94			42			
14	15.02			43			
15	14.48			44			
16	16.35			45			
17	12.75			46			
18	11.49			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Lic Tracing

SPILLS 82-0983

DATE 9/23/92

TIME 1000

STORAGE TANK LEVEL 1

39 G

2

CUMULATIVE TOTAL

200 G

GALLONS BAILED

0.06

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	19.85			26			
PW 2				27			
IW				28			
				29			
1	13.65	19.05	10	1	13.05		
2	12.12			31			
3	11.97			32			
4	14.2			33			
5	13.09			34			
6	11.88			35			
7	12.7	Trace		36			
8	13.41			37			
9	16.6	Trace		38			
10	13.48	13.4	.08	10	13.4		
11	18.79			40			
12	14.25			41			
13	14.83			42			
14	14.9			43			
15	14.36			44			
16	16.85			45			
17	12.65			46			
18	11.39			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: (Gruman) Calverton Fire Train SPILLS 82-0923 DATE 3-15-90 TIME 1030
STORAGE TANK LEVEL 1 39 G 2 _____
CUMULATIVE TOTAL 200 G GALLONS BAILED 112

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	ON			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	9.89			26			
PW 2	-			27			
IW	-			28			
	-			29	AFTER Bailing		
1	13.12	12.98	.14	30	13.05		
2	12.02			31			
3	11.90			32			
4	14.11			33			
5	13.01			34			
6	11.79			35			
7	12.69	12.59	.10	36	12.63		
8	13.36	13.32	.04	37	13.43		
9	16.51			38			
10	13.45	13.29	.16	39	13.36	Trace	
11	18.68			40			
12	14.16			41			
13	14.73			42			
14	14.51			43			
15	14.28			44			
16	16.17			45			
17	12.56			46			
18	11.31			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Geumann Calv. Fire Train Area SPILLS 820923 DATE 3-5-90 TIME 0915

STORAGE TANK LEVEL 1 39 G 2.

CUMULATIVE TOTAL 200 G. GALLONS BAILED 0.20 G.

Flowmeter #1. 33 Gpm Gallons Pumped 862752

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27	AFILE BAIGA		
IW				28			
				29			
1	13.00	12.92	0.08	1	12.96	TRACE	
2	11.95			31			
3	11.87			32			
4	14.05			33			
5	12.95			34			
6	11.73			35			
7	12.60	12.51	0.09	7	12.53	TRACE	
8	13.27	TRACE		37			
9	16.45			38			
10	13.40	13.23	0.18	10	13.28	13.27	0.01
11	18.62			40			
12	14.07			41			
13	14.67	TRACE		42			
14	14.75			43			
15	14.22			44			
16	16.10			45			
17	12.50			46			
18	11.25			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gravel Collector Firetrain

SPILLS 82-0923

DATE 2-23-90

TIME 09:30

STORAGE TANK LEVEL 1 39 G.

2

CUMULATIVE TOTAL 200 G.

GALLONS BAILED 0.25 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	0.01			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29	After cleaning		
1.	12.75	12.80	.15	30	12.84		
2	11.84			31			
3	11.70			32			
4	13.92			33			
5	12.83			34			
6	11.83			35			
7	12.56	12.41	.15	36	12.49		
8	13.15	Trace		37			
9	16.33			38			
10	13.37	13.10	.29	39	13.18		
11	18.50			40			
12	13.97			41			
13	14.54			42			
14	14.63			43			
15	14.10			44			
16	15.99			45			
17	12.38			46			
18	11.14			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CNH U. Fire Training SPILL # 82-0923 DATE 2/27/90 TIME 10:30
3.9 G.

STORAGE TANK LEVEL 1 200 G. 2 0.25 G.

CUMULATIVE TOTAL 200 G. GALLONS BAILED 0.25 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28	14.2 / CR J3H1/		
				29			
1:	12.92	12.86	.06	1	12.90		
2	11.92			31			
3	2.0022			32			
4	14.02			33			
5	12.90			34			
6	11.69			35			
7	12.55	12.48	.07	7	12.60		
8	13.22	TRACE		37			
9	16.40			38			
10	13.21	13.04	.17	10	13.06		
11	18.56			40			
12	14.06			41			
13	14.62			42			
14	14.70			43			
15	14.17			44			
16	16.05			45			
17	12.45			46			
18	11.20			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: GRUMMAN LAW FIRE TRAINING SPILL 82-0923 DATE 2-7-90 TIME 1345
STORAGE TANK LEVEL 1 38-G. 2 _____
CUMULATIVE TOTAL 199 GAL. GALLONS BAILED 0.50 GAL.

WELL #	DTW	DTP	PRODUCT	#
RW 1.				
RW 2.				
RW 3.				
RW 4.				
PW 1				
PW 2				
IW				
1	13.25	12.90	0.35	13.00
2	11.94			12.96
3	11.60	TRACE		0.04
4	14.10			
5	12.95			
6	11.99			
7	12.52	TRACE		
8	13.26	TRACE		
9	16.40	TRACE		
10	10.45	10.25	0.20	10.30
11	18.70			10.28
12	14.11			0.02
13	14.70			42
14	14.74			43
15	14.31			44
16	16.05			45
17	12.46			46
18	11.21			47
19				48
20				49
21				50



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Fire Training SPILL # 82-0923 DATE 2.14.90 TIME 1330
STORAGE TANK LEVEL 1 3.9 GAL. 2 _____
CUMULATIVE TOTAL 200 GAL. GALLONS BAILED 1 GAL

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	<u>12.03</u>			26			
PW 2				27			
IW				28			
				29			
1	<u>12.9</u>	<u>12.81</u>	<u>.09</u>	30			
2	<u>11.86</u>			31			
3	<u>11.79</u>			32			
4	<u>13.98</u>			33			
5	<u>12.85</u>			34			
6	<u>11.89</u>			35			
7	<u>12.53</u>	<u>12.43</u>	<u>.10</u>	36			
8	<u>13.2</u>	<u>13.17</u>	<u>.03</u>	37			
9	<u>16.33</u>			38			
10	<u>14.10</u>	<u>13.13</u>	<u>.97</u>	39			
11	<u>18.57</u>			40			
12	<u>14.03</u>			41			
13	<u>14.62</u>	<u>trace</u>		42			
14	<u>14.67</u>			43			
15	<u>14.12</u>			44			
16	<u>16.0</u>			45			
17	<u>12.39</u>			46			
18	<u>11.19</u>			47			
19				48			
20				49			
21				50			

Tel: 654-4900

MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

Fax: 654-4

82-0923

LOCATION: Cab. Line Training DATE 1/23/90 TIME 1000STORAGE TANK LEVEL 1. 38 2. _____ 3. _____ 4. _____CUMULATIVE TOTAL 199 BALED 0.19 GAL.PUMPING RATE RW1 28-727068 RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	13.4	13.35	.05		13.39		
2.	12.4			29.			
3.	12.29	12.25	.04		12.3		
4.	14.5			31.			
5.	19.39			32.			
6.	12.41			33.			
7.	13	Trace		34.			
8.	13.71	Trace		35.			
9.	16.91	16.89	.02	9	16.90		
10.	13.76	13.7	.06	10	13.78		
11.	19.11			38.			
12.	14.56			39.			
13.	15.14			40.			
14.	15.22			41.			
15.	14.69			42.			
16.	16.55			43.			
17.	18.91			44.			
18.	11.66			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

MPC ENVIRONMENTAL SERVIC.
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

82-0923

LOCATION: Collector Fire Station Inc. DATE 1/31/70 TIME 0845
 STORAGE TANK LEVEL 1. 38 GAL. 2. _____ 3. _____ 4. _____
 CUMULATIVE TOTAL 199 GAL Bailed 0.5 GAL.

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.							AFTER. Rail
1.	13.56	13.13	.43		13.25		
2.	12.17			29.			
3.	12.17	12.04	.13		12.13		
4.	14.35			31.			
5.	13.15			32.			
6.	13.19			33.			
7.	12.79	12.68		34.			
8.	13.54	13.48		35.			
9.	14.17	14.67	.08		14.78		
10.	13.75	13.50	.25		13.58		
11.	18.96			36.			
12.	14.39			39.			
13.	15.00			40.			
14.	15.04			41.			
15.	14.78			42.			
16.	16.29			43.			
17.	12.67			44.			
18.	16.27			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

Fax: 654-49

82-0923

LOCATION: Grumman G&W. Fire Train Area DATE 1-8-90 TIME 1100

STORAGE TANK LEVEL 1. 37 GAL. 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL 198 GAL. BAILED 0.5 G.

PUMPING RATE RW1 31 RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				AFTER BAILEN			
1.	13.40	13.24	0.16		13.31	13.30	0.01
2.	12.30						
3.	12.13	12.12	0.01				
4.	14.38						
5.	13.26						
6.	12.30						
7.	12.85	TRACE					
8.	13.59	TRACE					
9.	16.79						
10.	13.85	13.55	0.30		13.65	13.63	0.02
11.	18.97			38.			
12.	14.41			39.			
13.	14.99	TRACE		40.			
14.	15.10			41.			
15.	14.57			42.			
16.	16.45			43.			
17.	12.82			44.			
18.	11.56			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220

EAST PATCHOGUE, N.Y. 11772

Fax: 654-

82-0923

LOCATION: CALVERTON FIRE TRAINING DATE 1/16/90 TIME 0900

STORAGE TANK LEVEL 1. 37 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL 198 GAL. BAILED 0.75 GAL

PUMPING RATE RW1 28 G.P.M RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.	AFTER BAILE		
1.	13.75	13.24	.51	28.	13.46		
2.	12.35			29.			
3.	12.35	12.19	.16	30.	12.29		
4.	14.44			31.			
5.	13.31			32.			
6.	12.35			33.			
7.	12.95	12.92	.03	34.	12.92		
8.	13.71	13.67	.04	35.	15.69		
9.	16.83			36.			
10.	14.02	13.64	.38	37.	13.75		
11.	19.04			38.			
12.	14.50			39.			
13.	15.06			40.			
14.	15.15			41.			
15.	19.62			42.			
16.	16.50			43.			
17.	12.90			44.			
18.	11.62			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE • P.O. BOX 205 • BOHEMIA, N.Y. 11716 • (516) 467-8477
AFTER 5 P.M. (516) 567-5579

March 14, 1989

TO: Marine Pollution Control
P. O. Box 2220
375 Dunton Avenue
East Patchogue, NY 11772

RE: P.O. # 2945

Date: Collected ... 3/7/89 Analyzed ... 3/7-3/10/89 Report ... 3/14/89

Sampling Point

1. Grumman - Calverton, NY - Influent (Fire Training Area)
2. Grumman - Calverton, NY - Effluent (Fire Training Area)
3.
4.
5.

Parameters		1	2	3	4	5
Benzene	ug/l	1.4	<1.0			
Toluene	ug/l	<1.0	<1.0			
Xylene	ug/l	2.6	<1.0			
Chlorobenzene	ug/l	<1.0	<1.0			
Ethylbenzene	ug/l	<1.0	<1.0			
Dichlorobenzene	ug/l	<1.0	<1.0			

Lab Number 51765

438

JOHN PEDNEAULT
Lab Director

jm

82-0923

LOCATION: Pipe Line Training DATE 1/4/90 TIME 1000STORAGE TANK LEVEL 1. 36 GAD 2. _____ 3. _____ 4. _____CUMULATIVE TOTAL 197 G BAKED 0.38 G.PUMPING RATE RW1 32-646599 RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	12.06			24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	19.39	19.14	.25	1.	19.22		
2.	12.16			29.			
3.	12.1	12.04	.06	3.	12.05		
4.	14.27			31.			
5.	13.17			32.			
6.	12.22			33.			
7.	12.82	12.76	.16	7.	12.79		
8.	13.49	Trace		35.			
9.	16.69			36.			
10.	19.92	19.45	.47	10.	19.52		
11.	15.89			38.			
12.	14.38			39.			
13.	14.9	Trace		40.			
14.	15			41.			
15.	14.46			42.			
16.	16.34			43.			
17.	12.72			44.			
18.	11.46			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C891830/1

07/07/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton

COLLECTED BY: MPC

DATE COL'D: 06/22/89 RECEIVED: 06/23/89

SAMPLE: Water sample, influent, fire train

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m. + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: B. Andres, M.P.C. - J. Emington

REMARKS:

DIRECTOR

440



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE • P.O. BOX 205 • BOHEMIA, N.Y. 11716 • (516) 487-8477
AFTER 6 P.M. (516) 587-5570

June 9, 1989

TO: NVS Dept. Environmental Conservation
SUNY Building 40
Stony Brook, NY 11794

Date: Collected 5/31/89 Analyzed 5/31-6/5/89 Report 6/9/89

Sampling Point

1. Grumman, Calverton, NY - Fire Training - Wellhead Discharge
 - 2.
 - 3.
 - 4.
 - 5.

Spill # 82-0923

Lab Number 53376

im

cc: MPC

441

JOHN PEDNEAULT
Lab Director

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C892074/1

07/24/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fire Training
COLLECTED BY: MPC/Client DATE COL'D: 07/19/89 RECEIVED: 07/19/89

SAMPLE: Water sample, #82-0923, influent, 1100am

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: Barry Andres, J. Emington-MPC

REMARKS:

442

DIRECTOR

Thomas R. Sturt

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C891830/2

07/07/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 06/22/89 RECEIVED: 06/23/89

SAMPLE: Water sample, effluent, fire train

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: B. Andres, M.P.C. - J. Emington

REMARKS:

DIRECTOR

443

ECOFEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C892369/1

08/29/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton, Fire Training
COLLECTED BY: MarPolCon DATE COL'D: 08/16/89 RECEIVED: 08/16/89

SAMPLE: Water sample, influent, 1145

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o,p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: B. Andres, MPC-John Emington

REMARKS: Spill #820923

DIRECTOR

444

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C892074/2

07/24/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton Fire Training
COLLECTED BY: MPC/Client DATE COL'D:07/19/89 RECEIVED:07/19/89

SAMPLE: Water sample, #82-0923, effluent, 1100am

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc:Barry Andres, J. Emington-MPC

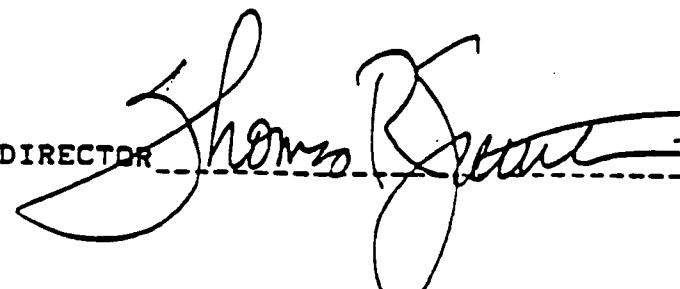
REMARKS:

DIRECTOR

rn#

9134

445



ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO.C893420/1

11/30/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Barry Andres

PO#30-28955

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 11/16/89 RECEIVED: 11/17/89

SAMPLE: Water sample, Fire Training, 1100

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, MPC

REMARKS:

DIRECTOR

446

NYSDOH ID# 10320

ECOFEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C892369/2

08/29/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton, Fire Training
COLLECTED BY: MarPollCon DATE COL'D: 08/16/89 RECEIVED: 08/16/89

SAMPLE: Water sample, Effluent, 1150

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: B. Andres, MPC-John Emington

REMARKS: Spill #820923

DIRECTOR

447

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C893664/2

12/27/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Barry Andres-A03-12

PO# 30-28955

SOURCE OF SAMPLE: Fire Train Area
COLLECTED BY: MPC DATE COL'D: 12/13/89 RECEIVED: 12/13/89

SAMPLE: Water sample, 930, effluent

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
oluene	ug/L	<2
Phyl Benzene	ug/L	<1
m-Xylene	ug/L	<2
-p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: J. Selva, MPC

REMARKS:

DIRECTOR

448

~~E~~CO TEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C893664/1

12/27/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Barry Andres-A03-12 PO# 30-28955

SOURCE OF SAMPLE: Fire Train Area
COLLECTED BY: MPC DATE COL'D: 12/13/89 RECEIVED: 12/13/89

SAMPLE: Water sample, 930, influent

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
Xylene	ug/L	<2
o,p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

-

cc: J. Selva, MPC

REMARKS:

DIRECTOR

449

16275

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.FILE
ONLY

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C900519/1

02/23/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keashey

PO# 30-28955

SOURCE OF SAMPLE: Firetraining Area, Calverton
COLLECTED BY: MPC DATE COL'D: 02/15/90 RECEIVED: 02/15/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J. Ohmann, GAC, J. Selva, MPC

REMARKS:

DIRECTOR

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C900353

02/05/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: B. Andres

SOURCE OF SAMPLE: Firetraining Area, Spill#82-0923, Job 1067
COLLECTED BY: M.P. Cont. DATE COL'D:01/31/90 RECEIVED:02/01/90

SAMPLE: Wastewater sample, effluent

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: Ohlmann-B08-30, J. Selva, M.P.C.

REMARKS:

DIRECTOR

451

NYSDOH ID# 10320

1559

EcoTest LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C903280/2****10/19/90**

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahey**PO# 30-28955**

SOURCE OF SAMPLE: Grumman, Calverton, Fire Train
COLLECTED BY: MPC DATE COL'D: 10/08/90 RECEIVED: 10/08/90

SAMPLE: Water sample

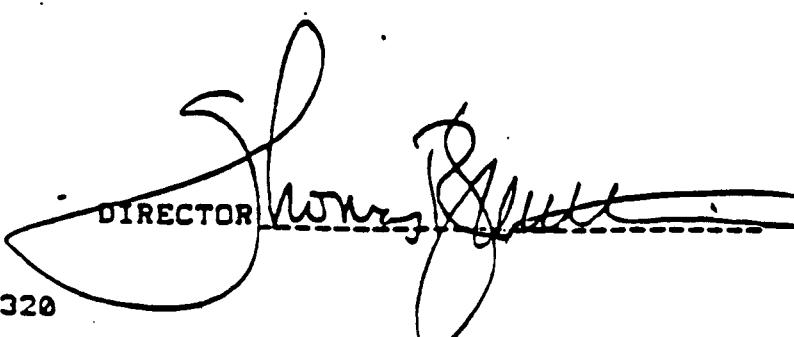
ANALYTICAL PARAMETERS

Benzene	ug/L	<2
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<2
m + p Xylene	ug/L	<4
o Xylene	ug/L	<2

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva, MPC

REMARKS:


DIRECTOR**452****n-****15024****NYSDOH ID# 10320**

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C902412/2

08/03/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keahey

SOURCE OF SAMPLE: Grumman, Calverton-Fire Training
COLLECTED BY: MPC DATE COL'D: 07/27/90 RECEIVED: 07/30/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva, MPC

REMARKS:

453

DIRECTOR

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C903921/2

12/14/90

Grumman Aerospace Corporation
Mail Station A-04-06
Calverton, NY 11933

ATTN: Charles Smith

PO# 30-28955

SOURCE OF SAMPLE: Grumman Calverton, Fire Training Area
COLLECTED BY: MPC DATE COL'D: 11/29/90 RECEIVED: 11/29/90

SAMPLE: Water sample, 8:45

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
c Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva, MPC

REMARKS:

454

DIRECTOR

rn-

18720

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C903553/1

11/07/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahey

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 10/30/90 RECEIVED: 10/30/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o-Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J.Ohlmann, GAC, J.Selva, MPC

REMARKS:

DIRECTOR

455

The recovery system at the fuel calibration area continues to operate, pumping at an average rate of 81 gallons per minute for 1990 (Figure 1). The total amount of product recovered to date is 1,115.5 gallons. Tables 1 through 3 are summaries of water samples collected at the discharge point, for 1988, 1989 and 1990, respectively. According to the data, the highest discharge concentration for 1988 was on April 26, at 170.2 ppb (for BTX). During 1989 the highest discharge concentration was at 64.7 ppb on May 31. The concentrations continue to decrease with a maximum of 36 ppb detected on October 8, 1990. The lab reports from which this data was obtained is found in the Appendix.

Table 4 is a summary of product thicknesses in the recovery well and wells number 4, 9, 11, 13 and 16. According to the data, the maximum product thickness in the recovery well was 0.25 feet on January 4. Well number 4 showed only a trace on November 20. Well number 9 had a maximum thickness of 0.30 feet on both June 29 and July 13. Monitoring well number 11 had a maximum of 0.22 feet on October 24. The maximum amount of product detected at the fuel calibration area was in well number 13 at 1.10 feet on September 21. Only a trace of product was detected in well number 16 on October 4. Wellsheets from which this data was compiled are found in the Appendix.



Grumman - Calverton
Fuel Calibration Area

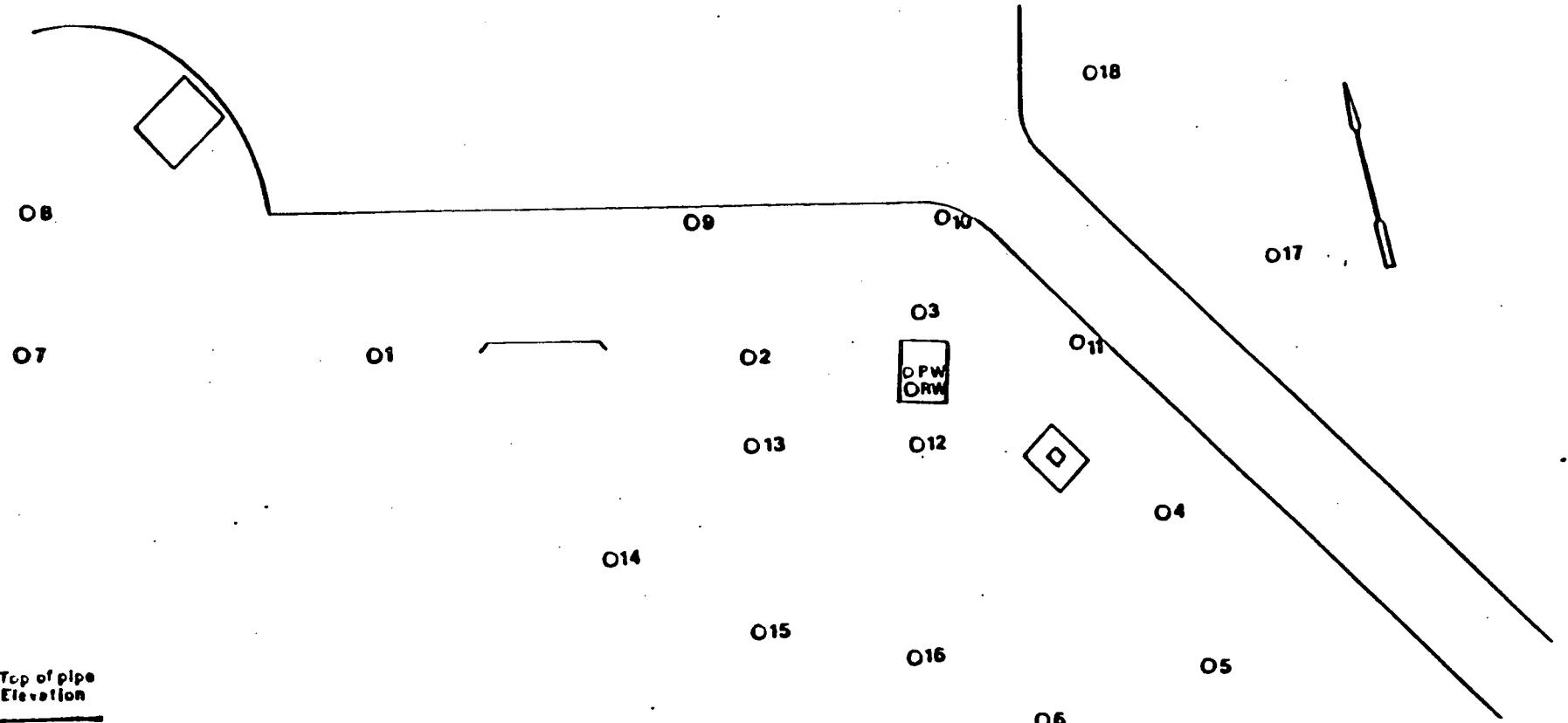
Prepared by:

MPC Environmental Services
January 11, 1991

P.O. Box 610
460 Edwards Avenue, Calverton, NY 11933
516-369-4900 FAX 516-369-4909

Table 1.
BTX Discharge Sample Results for 1988

Date	Discharge (ppb)
03/21	88.3
04/26	170.2



Well #	Top of pipe Elevation
RW	96.92
1	98.31
2	98.94
3	97.89
4	99.50
5	99.81
6	
7	100.39
8	100.20
9	99.33
10	99.17
11	99.77
12	99.28
13	100.00
14	101.16
15	101.06
16	100.06
17	99.24
18	99.12

MARINE POLLUTION CONTROL	
375 Dunton Avenue E. Patchogue, New York	
SCALE 1" = 30'	APPROVED BY:
DATE 12/3/1987	DRAWN BY
CALVERTON FUEL CAL.	
DRAWING NUMBER	

FIGURE 1.

Table 3.
BTX Discharge Sample Results for 1990

Date	Discharge (ppb)
02/15	<2.0
07/27	8.0
10/08	36.0
10/30	22.0
11/29	18.0

Table 2.
BTX Discharge Sample Results for 1989

Date	Discharge (ppb)
02/17	43.0
05/31	64.7
06/22	4.0
07/19	54.0
11/16	14.0
12/19	48.0

Table 4. (Continued)

Product Thicknesses for 1990 in Feet

Date	RW	#4	#9	#10	#11	#13	#16
05/24	T	0.00	0.00	0.00	0.00	0.00	0.00
06/01	0.00	0.00	T	0.00	T	0.00	0.00
06/07	0.00	0.00	T	0.00	T	0.00	0.00
06/13	0.00	0.00	T	0.00	0.02	0.00	0.00
06/21	0.00	0.00	0.22	0.00	0.00	0.00	0.00
06/29	0.00	0.00	0.30	0.00	0.00	0.00	0.00
07/05	T	0.00	0.00	0.00	0.00	0.00	0.00
07/13	0.00	0.00	0.30	0.00	0.00	0.00	0.00
07/20	0.00	0.00	T	0.00	0.00	0.00	0.00
08/03	0.00	0.00	T	0.00	0.00	0.55	0.00
07/27	0.00	0.00	0.06	0.00	0.00	0.05	0.00
08/10	0.00	0.00	0.05	0.00	0.03	0.32	0.00
08/16	0.00	0.00	0.01	0.00	0.02	0.10	0.00
08/23	0.00	0.00	T	0.00	0.00	T	0.00
08/31	0.00	0.00	T	0.00	T	0.49	0.00
09/05	0.00	0.00	T	0.00	T	0.45	0.00
09/14	0.00	0.00	T	T	T	0.85	0.00
09/21	0.00	0.00	T	0.00	T	1.10	0.00
09/27	0.00	0.00	T	0.00	T	0.65	0.00

T = Trace

Table 4.

Product Thicknesses for 1990 in Feet

Date	RW	#4	#9	#10	#11	#13	#16
01/04	0.25	0.00	0.14	0.00	0.00	0.00	0.00
01/08	0.18	0.00	T	0.00	0.00	0.00	0.00
01/16	0.15	0.00	T	0.00	0.00	0.00	0.00
01/23	0.14	0.00	T	0.00	T	0.00	0.00
01/31	0.21	0.00	T	0.00	T	0.00	0.00
02/07	0.00	0.00	T	0.00	T	0.00	0.00
02/14	0.00	0.00	T	0.00	T	0.00	0.00
02/23	T	0.00	0.02	0.00	0.02	0.00	0.00
02/27	0.00	0.00	0.00	0.00	T	0.00	0.00
03/05	0.00	0.00	T	0.00	0.00	0.00	0.00
03/15	0.00	0.00	T	0.00	T	0.00	0.00
03/23	0.00	0.00	0.00	0.00	T	0.00	0.00
03/29	0.00	0.00	T	0.00	0.00	0.00	0.00
04/25	0.00	0.00	T	0.00	T	0.00	0.00
04/14	0.00	0.00	T	0.00	0.00	0.00	0.00
04/12	0.00	0.00	T	0.00	T	0.00	0.00
04/05	0.00	0.00	0.00	0.00	T	0.00	0.00
05/02	0.00	0.00	T	0.00	T	0.00	0.00
05/10	0.00	0.00	0.03	0.00	0.01	0.00	0.00
05/17	T	0.00	0.00	0.00	T	0.00	0.00

T = Trace

Appendix.

Table 4. (Continued).

Product Thicknesses for 1990 in Feet

Date	RW	#4	#9	#10	#11	#13	#16
10/04	0.00	0.00	T	0.00	0.09	1.03	T
10/11	0.00	0.00	0.00	0.00	0.08	1.05	0.00
10/18	0.00	0.00	T	0.00	0.15	0.30	0.00
10/24	0.00	0.00	T	0.00	0.22	0.00	0.00
11/01	0.01	0.00	T	0.00	T	0.01	T
11/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/14	0.00	0.00	0.00	0.00	T	0.00	0.00
11/20	0.00	T	0.00	0.00	0.00	0.00	0.00
11/28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/07	0.00	0.00	0.00	0.00	0.01	0.00	0.00
12/13	0.00	0.00	0.00	0.00	T	0.00	0.00
12/20	0.00	0.00	0.00	0.00	T	0.00	0.00

T = Trace

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C903553/2

11/07/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keahey

SOURCE OF SAMPLE: Fuel Calibration, Calverton
COLLECTED BY: MPC DATE COL'D: 10/30/90 RECEIVED: 10/30/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	2
Toluene	ug/L	4
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	16

ANALYTICAL PARAMETERS

cc: J. Ohlmann, GAC, J. Selva, MPC

REMARKS:

466

DIRECTOR

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C903921/1

12/14/90

Grumman Aerospace Corporation
Mail Station A-04-06
Calverton, NY 11933

ATTN: Charles Smith

PO# 30-28955

SOURCE OF SAMPLE: Grumman Calverton, Calibration Area
COLLECTED BY: MPC DATE COL'D: 11/29/90 RECEIVED: 11/29/90

SAMPLE: Water sample, 9:05

ANALYTICAL PARAMETERS

Benzene	ug/L	3
Toluene	ug/L	2
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	13

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva, MPC

REMARKS:

DIRECTOR

rn# 18719

NYSDOH ID# 10320

467

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C902412/1

08/03/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keahey

SOURCE OF SAMPLE: Grumman, Calverton-Fuel Calibration
COLLECTED BY: MPC DATE COL'D: 07/27/90 RECEIVED: 07/30/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS		
Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	2
m - p Xylene	ug/L	4
o Xylene	ug/L	2

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva, MPC

REMARKS:

DIRECTOR

468

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C903280/1

10/19/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keashey

John Ohlmann
B08-30

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton-Fuel Calibration
COLLECTED BY: MPC DATE COL'D:10/08/90 RECEIVED:10/08/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<2
Toluene	ug/L	7
Ethyl Benzene	ug/L	<2
m + p Xylene	ug/L	11
o Xylene	ug/L	18

ANALYTICAL PARAMETERS

cc: J.Ohlmann, J.Selva, MPC

REMARKS:

469 DIRECTOR

CO TEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C893739****12/27/89**

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Barry Andres**PO# 30-28955****SOURCE OF SAMPLE: Grumman Calverton Fuel Cal Area****COLLECTED BY: MPC DATE COL'D:12/19/89 RECEIVED:12/20/89****SAMPLE: Water sample****ANALYTICAL PARAMETERS**

benzene	ug/L	2
Toluene	ug/L	5
methyl Benzene	ug/L	1
Xylene	ug/L	17
o,p Xylene	ug/L	23

ANALYTICAL PARAMETERS**cc: J. Selva, MPC****REMARKS:****DIRECTOR**

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777**

LAB NO. C900519/2

02/23/90

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Harvey Keahey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calib, Calverton
COLLECTED BY: MPC DATE COL'D: 02/15/90 RECEIVED: 02/15/90

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J. Ohlmann, GAC, J. Selva, MPC

REMARKS:

DIRECTOR

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C892074/3

07/24/89

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: John Ohlmann

PO# 30-28955

SOURCE OF SAMPLE: Calverton ~~Fire Training~~
COLLECTED BY: MPC/Client DATE COL'D: 07/19/89 RECEIVED: 07/19/89

SAMPLE: Water sample, #84-0011, effluent, 1300

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	4
Ethyl Benzene	ug/L	6
m Xylene	ug/L	18
o+p Xylene	ug/L	25

ANALYTICAL PARAMETERS

cc: Barry Andres, J. Emington-MPC

REMARKS:

DIRECTOR _____

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING****377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777****LAB NO. C893420/2****11/30/89**

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714

ATTN: Barry Andres**PO#30-28955**

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D:11/16/89 RECEIVED:11/17/89

SAMPLE: Water sample, Fuel, Calverton 1430

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	4
Ethyl Benzene	ug/L	<1
n Xylene	ug/L	<2
m,p Xylene	ug/L	9

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva, MPC

REMARKS:

DIRECTOR



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1815 NINTH AVENUE • P.O. BOX 205 • BOHEMIA, N.Y. 11716 • (516) 487-8477
AFTER 3 P.M. (516) 987-5579

June 9, 1989

TO: NVS Dept. Environmental Conservation
SUNY Building 40
Stony Brook, NY 11794

Date: Collected ... 5/31/89 Analyzed ... 5/31-6/5/89 Report ... 6/9/89

Sampling Point

1. Grumman, Calverton, NY - Fuel Calibration - Wellhead Discharge
 2.
 3.
 4.
 5.

Spill # 84-0011

Lab Number 53377

cc: MPC

JOHN PEDNEAULT
Lab Director

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777

LAB NO. C891830/3

07/07/89

Grumman Aerospace Corp. (Calverton)
Mail Station A-08-30
Bethpage, NY 11714

SOURCE OF SAMPLE: Grumman, Calverton
COLLECTED BY: MPC DATE COL'D: 06/22/89 RECEIVED: 06/23/89

SAMPLE: Water sample, fuel calibration

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Benzene	ug/L	<1			
Toluene	ug/L	<1			
Ethyl Benzene	ug/L	<1			
m + p Xylene	ug/L	<2			
<i>o</i> Xylene	ug/L	4			

cc: B. Andres, M. P. C. - J. Emington

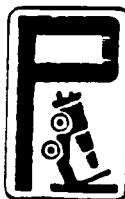
REMARKS:

DIRECTOR

• १३

7949

475



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE • P.O. BOX 205 • BOHEMIA, N.Y. 11718 • (516) 487-8477
AFTER 5 P.M. (516) 567-5579

April 28, 1988

TO: Marine Pollution Control
P.O. Box 2220
375 Dunton Avenue
East Patchogue, NY 11772

Date: Collected 4/26/88 **Analyzed** 4/26-4/28/88 **Report** 4/28/88

Sampling Point

1. Grumman, Calverton, NY - Fuel Calibration Discharge
 2.
 3.
 4.
 5.

JOHN PEDNEAULT
Lab Director

Lab Number 46264
MJA

476

Results for EPA 602 Scan
Purgeable Aromatics

Client: Marine Pollution Control

Re: Grumman PO#2923

Sample Identification: Discharge from Pump Well

Date Received: February 16, 1989

Date/Time/Analyst:
ds 6067-89 2-17-89/13:16/MN

Compound	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	4	1
Toluene ¹	3	1
Xylenes ¹	35	1
Ethyl Benzene	1	1

¹Xylenes as p, m, o isomers

Approved by: Maureen Murphy
Laboratory Manager

AIHA Laboratory Accreditation Number 169

New York State Interim Certification Number 10612



MPC ENVIRONMENTAL SERVICES

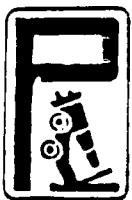
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Caherceton Fuel Co. Inc.SPILL # 84-0011DATE 12/20/90 TIME 1130STORAGE TANK LEVEL 127.50G

2.

CUMULATIVE TOTAL 1115.50GGALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.92			22			
RW 2				23			
RW 3				24			
RW 4				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.33			30			
2	6.92			31			
3	5.92			32			
4	7.50			33			
5	7.79			34			
6	—			35			
7	7.98			36			
8	7.71			37			
9	7.10			38			
10	2.08			39			
11	7.77	Trace		40			
12	7.92			41			
13	7.67			42			
14	9.06			43			
15	9.00			44			
16	8.04			45			
17	7.23			46			
18	7.04			47			
19				48			
20				49			
21				50			



PEDNEAULT ASSOCIATES, INC. TESTING LABORATORIES
1615 NINTH AVENUE P.O. BOX 205 BOHEMIA, N.Y. 11716 (516) 487-8477
AFTER 5 P.M. (516) 567-5579

March 24, 1988

TO: Marine Pollution Control
P. O. Box 2220
375 Dunton Avenue
East Patchogue, NY 11772

Date: Collected ... 3/21/88 Analyzed ... 3/21-3/24/88 Report ... 3/24/88

Sampling Point

1. Grumman Calverton - Fuel Calibration Area
2.
3.
4.
5.

Parameters	ug/l	1	2	3	4	5
Benzene	ug/l	1.5				
Toluene	ug/l	3.8				
Xylene	ug/l	48.9				
Chlorobenzene	ug/l	<1.0				
Ethylbenzene	ug/l	4.0				
Dichlorobenzene	ug/l	30.1				

Lab Number 45648

JOHN PEDNEAULT
Lab Director



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grimm's Caw. Fuel Can Area SPILL # 84-0011 DATE 12/7/90 TIME 0940
STORAGE TANK LEVEL 1 127.50 G 2 _____
CUMULATIVE TOTAL 1115.50 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.92			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.60			30			
2	6.92			31			
3	5.90			32			
4	7.50			33			
5	7.80			34			
6	—			35			
7	7.98			36			
8	7.71			37			
9	7.14			38			
10	7.10			39			
11	7.01	7.00	0.01	40			
12	7.41			41			
13	7.85			42			
14	9.10			43			
15	9.03			44			
16	8.06			45			
17	7.32			46			
18	7.00			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Fuel Cst. SPILL # 84-0011 DATE 13/13/90 TIME 1130
STORAGE TANK LEVEL 1 127.50 G. 2 _____
CUMULATIVE TOTAL 1115.50 G. GALLONS BAILED 0.00

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>8.06</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>6.29</u>			30			
2	<u>7.02</u>			31			
3	<u>6.04</u>			32			
4	<u>7.60</u>			33			
5	<u>7.90</u>			34			
6	<u>—</u>			35			
7	<u>8.08</u>			36			
8	<u>7.83</u>			37			
9	<u>7.29</u>			38			
10	<u>7.81</u>			39			
11	<u>7.83</u>	<u>Trace</u>		40			
12	<u>7.52</u>			41			
13	<u>8.08</u>			42			
14	<u>9.17</u>			43			
15	<u>9.13</u>			44			
16	<u>8.17</u>			45			
17	<u>7.33</u>			46			
18	<u>7.17</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Calv Fuel Cal. SPILLS 84-0011 DATE 11/20/90 TIME 11:45
STORAGE TANK LEVEL 1 127.50 G. 2 _____
CUMULATIVE TOTAL 1115.50 G. GALLONS BAILED 0.00

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.05			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.74			30			
2	7.05			31			
3	6.05			32			
4	7.61	TRAU		33			
5	7.92			34			
6	-			35			
7	8.09			36			
8	7.80			37			
9	7.30			38			
10	7.20			39			
11	7.84			40			
12	7.55			41			
13	8.14			42			
14	9.19			43			
15	9.15			44			
16	8.19			45			
17	7.35			46			
18	7.20			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calibration Fuel Calibration SPILL # 84-0011 DATE 11/28/90 TIME 12:00

STORAGE TANK LEVEL 1. 127.50G.

2.

CUMULATIVE TOTAL 1115.50G

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.17			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
"W				28			
				29			
1	6.75			30			
2	7.15			31			
3	6.15			32			
4	7.73			33			
5	8.03			34			
6	—			35			
7	8.19			36			
8	7.92			37			
9	7.42			38			
10	7.33			39			
11	7.96			40			
12	7.67			41			
13	8.29			42			
14	9.29			43			
15	9.25			44			
16	8.29			45			
17	7.96			46			
18	7.31			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fuel Cst.

SPILL # 84-0011

DATE 11/7/90

TIME 12:30

STORAGE TANK LEVEL 1. 127.50 G

2.

CUMULATIVE TOTAL 115.50 G

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.85			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.78			30			
2	6.84			31			
3	5.82			32			
4	7.40			33			
5	7.70			34			
6	—			35			
7	7.88			36			
8	7.60			37			
9	6.08			38			
10	7.00			39			
11	7.62			40			
12	7.32			41			
13	7.94			42			
14	8.98			43			
15	8.92			44			
16	7.98			45			
17	7.13			46			
18	6.96			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Fuel/Cahiz. SPILLS 34-0011 DATE 11/14/92 TIME 1300
STORAGE TANK LEVEL 1 127.50 G. 2 _____
CUMULATIVE TOTAL 1115.50 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.90			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.30			30			
2	6.92			31			
3	5.90			32			
4	7.48			33			
5	7.80			34			
6	—			35			
7	7.95			36			
8	7.70			37			
9	7.15			38			
10	7.07			39			
11	7.70	Trace		40			
12	7.41			41			
13	7.80			42			
14	9.06			43			
15	9.00			44			
16	8.06			45			
17	7.22			46			
18	7.03			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calvertta Fuel/Cabiz. SPILL # 584-0011 DATE 10/24/90 TIME 1500
STORAGE TANK LEVEL 1. 12.7.5L G 2.
CUMULATIVE TOTAL 115,550 GALLONS BAILED 0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.35			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
1	9.03			29			ARTEX Bail
2	6.52			30			
3	4.40			31			
4	6.98			32			
5	7.30			33			
6	—			34			
7	7.43			35			
8	7.17			36			
9	5.27	Trace		37			
10	6.50			38			
11	7.35	7.13	.22	39			
12	6.59			40			
13	6.40			41			
14	5.56			42			
15	8.52			43			
16	7.57			44			
17	6.70			45			
18	6.45			46			
19				47			
20				48			
21				49			
				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Colverte | Fuel Calibration SPILL 84-0011 DATE 11-1-90 TIME 12:30

STORAGE TANK LEVEL 1 127.50

2

CUMULATIVE TOTAL 115.50

GALLONS BAILED trace

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.66	7.65	.01	22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29			
1	6.19			30			
2	6.46			31			
3	5.15			32			
4	7.22			33			
5	7.53			34			
6	-			35			
7	7.69			36			
8	7.40			37			
9	6.92	Trace		38			
10	6.81			39			
11	7.45	Trace		40			
12	7.15			41			
13	7.63	7.62	.01	42			
14	8.80			43			
15	8.76			44			
16	7.79			45			
17	6.95			46			
18	6.78			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahertown Fuel/Cat/

SPIKE 84-0011

DATE 9/11/90

TIME 12:00

STORAGE TANK LEVEL 1 127.6

2

CUMULATIVE TOTAL 11156.

GALLONS BAILED 16

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.25			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER Rail
1	6.41			30			
2	7.24			31			
3	6.23			32			
4	7.85			33			
5	8.15			34			
6	—			35			
7	8.24			36			
8	7.98			37			
9	7.46			38			
10	7.42			39			
11	8.13	8.05	.08		8.08		
12	7.75			41			
13	9.30	8.15	1.05		9.30		
14	9.40			43			
15	9.35			44			
16	8.80			45			
17	7.58			46			
18	7.80			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahertown Fuel/Cahill SPILL# 84-0011 DATE 10/18/90 TIME 12:00
STORAGE TANK LEVEL 1 127.30 G. 2 _____
CUMULATIVE TOTAL 1115.30 G. GALLONS BAILED 0.30 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	790			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER BAII
1	5.85			30			
2	6.90			31			
3	5.90			32			
4	2.50			33			
5	2.85			34			
6	-			35			
7	7.95			36			
8	7.68			37			
9	7.17	TRACE		38			
10	7.10			39			
11	7.85	7.70	.15	41	7.70		
12	2.42			42			
13	8.05	7.75	.30	43	8.37		
14	9.07			44			
15	9.02			45			
16	8.06			46			
17	7.22			47			
18	7.05			48			
19				49			
20				50			
21							



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Fuel / Cahib SPILL # 84-0011 DATE 9-27-90 TIME 12:30
STORAGE TANK LEVEL 1 125.6, 2 2
CUMULATIVE TOTAL 1113G. GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.15			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
					AFTER	Bail	
1	6.35			30			
2	7.13			31			
3	6.03			32			
4	7.73			33			
5	8.05			34			
6	—			35			
7	8.12			36			
8	7.85			37			
9	6.97	Trace		38			
10	7.31			39			
11	8.00	Trace		40			
12	7.65			41			
13	8.70	8.05	.65	13	8.75		
14	9.27			43			
15	9.23			44			
16	8.30			45			
17	7.46			46			
18	7.27			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cohol Fuel/Calibration SPILL # 84-0011 DATE 10/4/90 TIME 1200
STORAGE TANK LEVEL 1 1270. 2 _____
CUMULATIVE TOTAL 11156. GALLONS BAILED 16.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.25			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW							AFTER Bail!
				29			
1	7.16			30			
2	7.22			31			
3	6.23			32			
4	7.81			33			
5	8.12			34			
6	—			35			
7	8.22			36			
8	7.96			37			
9	7.51	Trace		38			
10	7.40			39			
11	8.11	8.02	.09	41	8.05		
12	7.73			42			
13	9.15	8.12	1.03	43	9.22		
14	9.37			44			
15	9.25			45			
16	8.37	Trace		46			
17	7.55			47			
18	7.37			48			
19				49			
20				50			
21							



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Collection Fiel Col.

SPILL# 84-0011

DATE 7/17/90

TIME 1300

STORAGE TANK LEVEL 1 112G.

2

CUMULATIVE TOTAL 1100G.

GALLONS BAILED 1.0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.20			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.93			30			
2	7.17			31			
3	6.18			32			
4	7.76			33			
5	8.05			34			
6	—			35			
7	8.15			36			
8	7.85			37	after build		
9	7.92	TRACE		38			
10	7.33	TRACE		39			
11	8.00	TRACE		40			
12	7.70			41			
13	8.95	8.10	.85	13	8.95		
14	9.31			43			
15	9.27			44			
16	8.32			45			
17	7.47			46			
18	7.30			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton F-E / Calibration SPILL 84-0011 DATE 9/21/90 TIME 1300
STORAGE TANK LEVEL 1 113 G. 2 _____
CUMULATIVE TOTAL 1101 G. GALLONS BAILED 1.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.20			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER Bail
1	6.54			30			
2	7.17			31			
3	6.18			32			
4	7.77			33			
5	8.08			34			
6	—			35			
7	8.15			36			
8	7.88			37			
9	7.32	Trace		38			
10	7.35			39			
11	8.02	TRACE		40			
12	7.70			41			
13	9.17	8.07	1.10	13	8.92		
14	9.31			43			
15	9.26			44			
16	8.32			45			
17	7.47			46			
18	7.32			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CALVERTON - FUEL CALIBRATION SPILL# 84-0011 DATE 8/31/90 TIME 11:05
STORAGE TANK LEVEL 1 115. 2 _____
CUMULATIVE TOTAL 1099 G. GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.45			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	9.81			26			
PW 2				27			
IW				28			
				29			
1	6.31			30			
2	6.52			31			
3	5.46			32			
4	7.19			33			
5	7.56			34			
6	—			35			
7	7.76			36			
8	7.48			37			
9	6.74	TRACE		38			
10	6.71			39			
11	7.35	TRACE		40			
12	6.98			41			
13	8.06	7.57	0.49	12	7.63	TRACE	
14	9.78			43			
15	8.72			44			
16	7.77			45			
17	7.96			46			
18	6.73			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cohesett Fuel Co. SPILL # 84-0011 DATE 9/5/90 TIME 1:30P
STORAGE TANK LEVEL 1 111.6 2.
CUMULATIVE TOTAL 1099.6. GALLONS BAILED 0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	8.00			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			AFTER BAI /
PW 2				27			
IW				28			
				29			
1	7.02			30			
2	7.00			31			
3	6.00			32			
4	7.59			33			
5	7.90			34			
6	—			35			
7	7.98			36			
8	7.70			37			
9	7.17	TRACE		38			
10	7.16			39			
11	7.82	TRACE		40			
12	7.52			41			
13	8.50	8.05	.95	13	8.46		
14	9.14			43			
15	9.10			44			
16	8.16			45			
17	7.30			46			
18				47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Chemical Collection Fuel Calibration SPILLS 84 Gallons DATE 8-16-92 TIME 1100STORAGE TANK LEVEL 1 107 G. 2. 107 G.
CUMULATIVE TOTAL 1095 G. GALLONS BAILED 0.12

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.28			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29	11 Fter	12.1.1.6	
1	6.10			30			
2	6.23			31			
3	5.14			32			
4	6.90			33			
5	7.27			34			
6	-			35			
7	7.47			36			
8	7.17			37			
9	6.51	6.50	.01	9	8.31		
10	6.39			39			
11	7.07	7.05	.07	11	7.76		
12	6.69			41			
13	7.43	7.33	.10	13	11.05		
14	8.49			43			
15	8.47			44			
16	7.46			45			
17	6.65			46			
18	6.43			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Robertson - Fuel Oil Spill SPILL # 84-0011 DATE 8/23/90 TIME 1900
STORAGE TANK LEVEL 1 1075 G. 2 _____
CUMULATIVE TOTAL 1095 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.96	Trace		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.64			30			
2	6.42			31			
3	5.35			32			
4	7.12			33			
5	7.17			34			
6	—			35			
7	7.65			36			
8	7.37			37			
9	6.7	Trace		38			
10	6.61			39			
11	7.31			40			
12	6.9			41			
13	7.55	Trace		42			
14	8.74			43			
15	9.68			44			
16	7.71			45			
17	6.87			46			
18	6.7			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CALVERTON - FUEL CALIBRATION

SPILL# S4-0011

DATE 8/3/90

TIME 13:30

STORAGE TANK LEVEL 1 9.7 G.

2

CUMULATIVE TOTAL 1085 G

GALLONS BAILED

0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.35			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1	10.25			26			
PW 2				27			
IW				28			
				29			
1	6.66			30			
2	6.39			31			
3	5.34			32			
4	7.06			33			
5	7.42			34			
6	—			35			
7	7.63			36			
8	7.35			37			
9	6.75	TRACE		38			
10	6.58			39			
11	7.25			40			
12	6.86			41	AFTER BAIL		
13	7.48	7.43	0.55	13	8.04	N/P	
14	8.65			43			
15	8.59			44			
16	7.64			45			
17	6.83			46			
18	6.62			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fuel Calibration - Calverton SPILL 84-0011 DATE 8/10/90 TIME 13:30
STORAGE TANK LEVEL 1. 1040 2. _____
CUMULATIVE TOTAL 10920 GALLONS BAILED 0.50

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.26			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1				30			
2	6.33			31			
3	5.26			32			
4	7.05			33			
5	7.4			34			
6	—			35	After Bailed		
7	7.59			36			
8	7.3			37			
9	6.67	6.62	.05	38	6.73		
10	6.55			39			
11	7.27	7.24	.03	40	7.25		
12	6.88			41			
13	7.73	7.41	.32	42	7.85	7.84	.01
14	8.65			43			
15	8.6			44			
16	7.65			45			
17	6.79			46			
18	6.61			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fuel Col.

SPILL# 84-0011

DATE 7/20/90 TIME 1:300

STORAGE TANK LEVEL 1 97 G

2.

CUMULATIVE TOTAL 1085 G

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.95			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.3			30			
2	6.14			31			
3	5.07			32			
4	6.81			33			
5	7.18			34			
6	—			35			
7	7.98			36			
8	7.1			37			
9	6.41	Trace		38			
10	6.31			39			
11	6.98			40			
12	6.61			41			
13	7.26			42			
14	8.41			43			
15	8.36			44			
16	7.89			45			
17	6.56			46			
18	6.36			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fuel Col.

SPILL# 84-0011

DATE 7/27/90

TIME 14:30

STORAGE TANK LEVEL 1

97 G.

2.

CUMULATIVE TOTAL

1085 G.

GALLONS BAILED

0.10

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.65			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.01			30			
2	6.6			31			
3	5.6			32			
4	7.18			33			
5	7.5			34	After Bailed		
6	—			35			
7	7.55			36			
8	7.27			37			
9	6.9	6.74	.06	38.	6.84		
10	6.75			39			
11	7.39			40			
12	7.15			41			
13	7.22	7.67	.05	42.	7.79		
14	8.75			43			
15	8.71			44			
16	7.76			45			
17	6.98			46			
18	6.7			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Kiel Col SPILL # 84-0011 DATE 2/07/90 TIME 1000
STORAGE TANK LEVEL 1 636 2.
CUMULATIVE TOTAL 10516 GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.75	TURP		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.70			30			
2	5.85			31			
3	4.78			32			
4	6.54			33			
5	6.84			34			
6	—			35			
7	7.11			36			
8	6.82			37			
9	6.06			38			
10	6.01			39			
11	6.68			40			
12	6.31			41			
13	6.98			42			
14	8.13			43			
15	8.07			44			
16	7.11			45			
17	6.26			46			
18	6.04			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Fuel ColSPILL # 84-0011DATE 7/19/90TIME 1400

STORAGE TANK LEVEL 1

756.

2

CUMULATIVE TOTAL

10636

GALLONS BAILED

0.25

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>7.25</u>	<u>6.74</u>	<u>.51</u>	22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>5.69</u>			30			
2	<u>5.89</u>			31			
3	<u>3.99</u>			32			
4	<u>6.61</u>			33			
5	<u>6.98</u>			34			
6	<u>—</u>			35			
7	<u>7.14</u>			36	<u>After Bailed</u>		
8	<u>6.84</u>			37			
9	<u>5.01</u>	<u>4.71</u>	<u>.30</u>	9.	<u>5.12</u>	<u>5.11</u>	<u>.01</u>
10	<u>6.13</u>			39			
11	<u>6.74</u>			40			
12	<u>6.50</u>			41			
13	<u>7.1</u>			42			
14	<u>8.29</u>			43			
15	<u>8.17</u>			44			
16	<u>7.21</u>			45			
17	<u>6.33</u>			46			
18	<u>6.19</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fuel Col. SPILLS 84-0011 DATE 6/21/90 TIME 1300
STORAGE TANK LEVEL 1 63-G. 2 _____
CUMULATIVE TOTAL 10510. GALLONS BAILED 0.20

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.67			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.51			30			
2	5.71			31			
3	4.66			32			
4	6.4			33			
5	6.76			34			
6	—			35	AFTFR BAILED		
7	7.01			36			
8	6.72			37			
9	6.08	5.86	28	38	G.O.3	Trace	
10	5.9			39			
11	6.57			40			
12	6.29			41			
13	6.88			42			
14	8.04			43			
15	7.97			44			
16	7.			45			
17	6.14			46			
18	5.94			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Kuel Col. SPILL # 84-0011 DATE 6/29/90 TIME 13:30
STORAGE TANK LEVEL 1. 63.6 2.
CUMULATIVE TOTAL 10516 GALLONS BAILED 0.20

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.87			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	6.16			30			
2	5.95			31			
3	4.88			32			
4	6.60			33			
5	6.98			34			
6	—			35			
7	7.21			36			
8	6.93			37			
9	6.42	6.18	.90	38	6.94	Tank	
10	6.11			39			
11	6.78			40			
12	6.41			41			
13	7.09			42			
14	8.29			43			
15	9.15			44			
16	7.20			45			
17	6.36			46			
18	6.14			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Lul Col SPILLS 84-0011 DATE 6/7/90 TIME 12:30
STORAGE TANK LEVEL 1. 63 G 2.
CUMULATIVE TOTAL 1051 G GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.41			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.47			30			
2	5.35			31			
3	4.84			32			
4	6.1			33			
5	6.47			34			
6	—			35			
7	6.7			36			
8	6.80			37			
9	4.34	Trace		38			
10	5.41			39			
11	6.24	Trace		40			
12	5.98			41			
13	6.49			42			
14	7.8			43			
15	7.73			44			
16	6.74			45			
17	5.8			46			
18	5.59			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Oil Field SPILLS DATE 6-13-90 TIME

STORAGE TANK LEVEL 1 63-G.

2

CUMULATIVE TOTAL 10516

GALLONS BAILED

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6-1			22			
RW 2.	-			23			
RW 1.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29	111-T-1	111-T-2	
1	5.245			30			
2	5.745			31			
3	4.745			32			
4	1.14			33			
5	1.63			34			
6	-			35			
7	6.745			36			
8	1.14			37			
9	5.14	T-100		38	5.14		
10	4.745			39	-		
11	1.415	6.41		40	1.415		
12	2.37			41			
13	1.745			42			
14	7.245			43			
15	7.245			44			
16	6.84			45			
17	1.14			46			
18	2.37			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gemman Colv Twp CAL. Area SPILLS 84.00 DATE 5-24-70 TIME 1100
STORAGE TANK LEVEL 1. 63 G 2. _____
CUMULATIVE TOTAL 105 / G GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.05	TRUCK		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.28			30			
2	6.04			31			
3	5.00			32			
4	6.60			33			
5	6.90			34			
6	-			35			
7	7.60			36			
8	6.76			37			
9	6.17			38			
10	6.17			39			
11	6.84			40			
12	6.50			41			
13	6.93			42			
14	8.20			43			
15	8.15			44			
16	8.17			45			
17	6.29			46			
18	6.10			47			
19				48			
20				49			
21				50			



HPC ENVIRONMENTAL SERVICES
P.O. BOX 610
Calverton, NY 11925
TEL: (516) 364-4900

Action Fire training SP111# 82-0923 Date 5-22-86 Time 0830
Storage tank level 1.59.25 041 20041 Total gallons hauled 0.12.0-1
Input rate 32 BPM Total gallons pumped 25.2220 Pressure -----psi
Cumulative total 220.29 041

SP111#	DTW	OTP	Product	"	DTW	OTP	Product
110				"	11.52		
13.25	13.15	.10		"			
12.19				"			
12.5				"			
14.27				"			
13.18				"			
11.97				"			
12.77	Trace			"			
13.5				"			
16.7				"			
13.5				"			
19.9				AFTER HAULING			
14.94				"	DTW	OTP	Product
14.36				"	13.14	Trace	
15.							
14.47							
16.34							
12.79							



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Collected Fuel Oil

SPILL # 84-0011

DATE 5-10-90

TIME 1030

STORAGE TANK LEVEL 1 63 G.

2

CUMULATIVE TOTAL 1051 G.

GALLONS BAILED

trace

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.20			22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29			
1	5.68			30			
2	5.80			31			
3	4.74			32			
4	6.46			33			
5	6.83			34			
6	-			35			
7	7.13			36			
8	6.71			37			
9	6.07	6.04	.03	38	6.08		
10	5.98			39			
11	6.65	6.64	.01	40	6.72		
12	6.24			41			
13	6.91			42			
14	8.09			43			
15	8.03			44			
16	7.05			45			
17	6.21			46			
18	6.01			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Livestock Spill # 82-0923 Date 5-28-91 Time 0830
Storage tank level 29.51 gal Cumulative total 220.55 Total gallons bailed 0.06
umping rate .92 gpm Total gallons pumped 820.29 Pressure _____ psi
Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____
S11 Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____
1 Levels 1 _____ 2 _____

Well #	DTW	DTP	Product	#	DTW	DTP	Product
1.W				10	11.66		
	13.46	13.33	.13	19			
2	12.98	Trans		20			
	12.24			21			
4	14.47			22			
	13.36			23			
6	12.13			24			
	12.96	Trans		25			
7	13.7			26			
	16.88			27			
8	13.7			28			
11	19.08			29			
2	14.54			30			
13	15.13			AFTER BAILEING			
4	15.18			"	DTW	DTP	Product
15	14.66			1.	13.53	13.5	.03
6	16.52						
17	12.92						



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Cohorton - Fuel Col.SPILL # 84-0011DATE 4/25/90TIME 1330

STORAGE TANK LEVEL 1

630

2

CUMULATIVE TOTAL

10510

GALLONS BAILED

0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.46</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>4.95</u>			30			
2	<u>5.37</u>			31			
3	<u>4.44</u>			32			
4	<u>6.17</u>			33			
5	<u>6.53</u>			34			
6	<u> </u>			35			
7	<u>6.8</u>			36			
8	<u>6.51</u>			37			
9	<u>5.5</u>	<u>Trace</u>		38			
10	<u>5.68</u>			39			
11	<u>6.95</u>	<u>Trace</u>		40			
12	<u>5.94</u>			41			
13	<u>6.65</u>			42			
14	<u>7.82</u>			43			
15	<u>7.77</u>			44			
16	<u>6.82</u>			45			
17	<u>5.92</u>			46			
18	<u>5.71</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-14-91 Time 0830

Location: Calverton - Lietzaining Spill #: 82-0929

Storage tank level 59.88 gallons Recovered to date 220.92 gal.

Pump rate : 32 gpm Tot.gal. pumped 0911.3 Tot.gal.bailed 0.12

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product #	DTW	DTP	Product
RW				18	11.76	
1	13.54	19.44	.10			
2	12.49					
3	12.35					AFTER BAILED
4	14.62			1.	13.44	Trace
5	13.47			7.	19.09	
6	12.27					
7	13.13	19.09	.04			
8	13.84	Trace				
9	17.	Trace				
10	13.82					
11	19.23					
12	14.68					
13	15.28					
14	15.69					
15	14.8					
16	16.64					
17	13.02					



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cohesett - Fuel Col.

SPILL # 84-0011

DATE 4/12/90

TIME 13:30

STORAGE TANK LEVEL 1

63 G.

2

CUMULATIVE TOTAL

1051 G.

GALLONS BAILED

0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.6</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>4</u>			30			
2	<u>5.5</u>			31			
3	<u>4.52</u>			32			
4	<u>6.91</u>			33			
5	<u>6.67</u>			34			
6	<u>—</u>			35			
7	<u>6.97</u>			36			
8	<u>6.7</u>			37			
9	<u>4.91</u>	<u>Trexco</u>		38			
10	<u>5.85</u>			39			
11	<u>6.5</u>	<u>Trexco</u>		40			
12	<u>6.09</u>			41			
13	<u>6.67</u>			42			
14	<u>7.94</u>			43			
15	<u>7.87</u>			44			
16	<u>6.9</u>			45			
17	<u>6.07</u>			46			
18	<u>5.86</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-27-91 Time 1000

Location: Calverton - Site training

Spill # 82-0929

Storage tank level 60.63 gallons

Recovered to date 221.67 gal

Pump rate : .33 gpm Tot.gal. pumped 951061 Tot.gal.bailed 0.50

Well#	DTW	DTP	Product #	DTW	DTP	Product
-------	-----	-----	-----------	-----	-----	---------

RW						After Bailing
1	13.93	13.62	.31	1.	13.61	Trace
2	12.65	Trace		3.	12.52	
3	12.65	12.51	.14	7.	13.25	
4	14.79			9.	17.15	Trace
5	13.65					
6	12.43					
7	13.29	13.25	.04	28		
8	14.			29		
9	17.32	17.12	.20	30		
10	13.96			31		
11	19.37			32		
12	14.85			33		
13	15.45			34		
14	15.5			35		
15	14.95			36		
16	16.76			37		
17	13.2			38		
18	12.			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION:

Fuel Calibration

STORAGE TANK LEVEL 1.

63 G.

SPILL # 84-1011

DATE 3/29/90

TIME 1300

CUMULATIVE TOTAL

1051 G.

2

GALLONS BAILED

0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.5	Trace		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
1	5.7			29			
2	6.11			30			
3	5.05			31			
4	6.76			32			
5	7.12			33			
6	—			34			
7	7.4			35			
8	7.12			36			
9	6.38	Trace		37			
10	6.3			38			
11	6.95			39			
12	6.53			40			
13	7.23			41			
14	8.41			42			
15	8.35			43			
16	7.41			44			
17	6.51			45			
18	6.32			46			
19				47			
20				48			
				49			
				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 2-17-91 Time 1000

Location: Grumman Calverton Fire Training Spill # 82-0923
Storage tank level 70 gallons corrections → Recovered to date 231 gal.
Pump rate : 75 gpm Tot.gal. pumped 32260 Tot.gal.bailed .25

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW	Reau-Ca				AFTER Bailing		
1	14.22	14.00	.22	1	14.04		
2	13.06	13.03	.03	2	13.07		
3	13.02	12.91	.11	3	12.96		
4	15.14				-		
5	13.98				-		
6	12.76				-		
7	13.68	13.64	.04	7	13.91		
8	14.34				-		
9	17.68	17.52	.16	9	17.62		
10	14.34						
11	19.73						
12	15.20						
13	15.81						
14	15.83						
15	15.29						
16	17.17						
17	13.52						
18	12.26						



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Calverton Fire/Calibration SPILL # 84-0011

DATE 3/15/90

TIME 1130

STORAGE TANK LEVEL 1. 63 G.

2.

CUMULATIVE TOTAL 1051 G.

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.44	7.43	01	22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29			
1	5.43			30			
2	6.43			31			
3	5.43			32			
4	6.96			33			
5	7.27			34			
6	-			35			
7	7.43			36			
8	7.14			37			
9	6.65	Trace		38			
10	6.58			39			
11	7.20	Trace		40			
12	6.90			41			
13	7.54			42			
14	8.56			43			
15	8.51			44			
16	7.55			45			
17	6.57			46			
18	6.51			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-31-91 Time 0915

Location: Geumann (AW) Fire Train Area

Spill #: 82-0923

Storage tank level 71 gallons

Recovered to date 232 gal

Pump rate: 32 gpm Tot.gal. pumped 091766 Tot.gal.bailed .50

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Well#	OTW	DTP	Product	#	OTW	DTP	Product
RW				18	12.39		
1	14.29	14.13	0.16	19			
2	13.33	13.13	0.20	20			
3	13.04	TRACE		21			
4	15.33						AFTER BAILED
5	14.14			1	14.19	TRACE	
6	12.92			2	14.21	14.19	0.02
7	13.81	13.75	0.06	7	13.77	TRACE	
8	14.50			9	17.67	17.64	0.03
9	17.71	17.62	0.09	27			
10	14.48	TRACE		28			
11	19.92			29			
12	15.34			30			
13	15.98			31			
14	15.99			32			
15	15.45			33			
16	17.25			34			
17	13.67			35			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cath. Fuel / Cetane Kerosene SPILL # 84-0011 DATE 2/27/87 TIME 14:30
STORAGE TANK LEVEL 1 63 G. 2 _____
CUMULATIVE TOTAL 1051 G. GALLONS BAILED _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.10			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.05			30			
2	6.25			31			
3	4.19			32			
4	6.75			33			
5	2.06			34			
6	—			35			
7	7.24			36			
8	6.74			37			
9	5.78			38			
10	6.27			39			
11	7.00	TACSE		40			
12	6.72			41			
13	7.18			42			
14	8.40			43			
15	8.35			44			
16	7.35			45			
17	6.95			46			
18	6.30			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 610
Calverton, NY 11923
Tel: (516) 565-4900

Action Fire training Spill # 84-09-23 Date 8-16-91 Time 0900
Inflow tank level 10.72' 001 2.001 Total gallons drained 0.50' 001
Flow rate 32 GPM Total gallons pumped 1646.88 Pressure 10 psi
Inflow total 233' 001

#	DTW	OTP	Product	"	DTW	OTP	Product
1	14.48	14.17	.31	"	12.46		
2	13.25	13.15	.10	"			
3	13.22	13.12	.10	"			
4	15.4			"			
5	14.23			"			
6	13.			"			
7	14.02	13.85	.17	"			
8	14.57			"			
9	17.92	17.67	.25	"			
10	14.54			"			
11	20.01				AFTER BAILING		
12	15.43			"	DTW	OTP	Product
13	16.12			1.	14.2		Trace
14	16.76			2.	13.12		
15	15.53			3.	13.15		
16	17.3			7.	13.84		Trace
17	13.72			9.	12.7		Trace



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Fuel CalibrationSPILL# 84-0011DATE 2/14/90TIME 0930STORAGE TANK LEVEL 1 63 G

2.

CUMULATIVE TOTAL 1051GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.29</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1.	<u>3.88</u>			30			
2	<u>5.21</u>			31			
3	<u>4.31</u>			32			
4	<u>6.07</u>			33			
5	<u>6.4</u>			34			
6	<u>—</u>			35			
7	<u>6.68</u>			36			
8	<u>6.4</u>			37			
9	<u>5.25</u>	<u>Trace</u>		38			
10	<u>5.58</u>			39			
11	<u>6.31</u>	<u>Trace</u>		40			
12	<u>5.99</u>			41			
13	<u>6.49</u>			42			
14	<u>7.72</u>			43			
15	<u>7.67</u>			44			
16	<u>6.7</u>			45			
17	<u>5.82</u>			46			
18	<u>5.68</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-30-91 Time 0830

Location: Firetraining Spill #: 82-0923

Storage tank level _____ gallons Recovered to date _____ gal.

Pump rate: 32 gpm Tot.gal. pumped 22969.3 Tot.gal.bailed _____

Well # UTW DTP Product # UTW DTP Product

RW				#		after	bailing	
1	13.83	13.71	.12		1.	13.92		
2	12.71	Trace			3.	12.75		
3	12.71	12.64	.07		7.	13.42		
4	14.95			25				
5	19.73			26				
6	12.50			27				
7	19.42	13.35	.07	28				
8	14.11			29				
9	17.21	Trace		30				
10	14.05			31				
11	19.54			32				
12	14.81			33				
13	15.63			34				
14	15.58			35				
15	15.01			36				
16	16.79			37				
17	13.23			38				
18	11.96			39				
19				40				
20				41				

MPC ENVIRONMENTAL SERVIC.

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

84-0011

LOCATION: Cahueton Fuel C DATE 1/21/80 TIME 1:22 P.M.STORAGE TANK LEVEL 1. 63 G. 2. _____ 3. _____ 4. _____MULATIVE TOTAL 10516.PUMPING RATE RW1 OFF RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.50	6.29	,21	24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	3.75			28.			
2.	5.32			29.			
3.	3.64			30.			
4.	6.04			31.			
5.	6.42			32.			
6.	11.7-			33.			
7.	1.15			34.			
8.	6.46			35.			
9.	9.21	Trace		36.			
10.	5.50			37.			
11.	6.25	Trace		38.			
12.	5.81			39.			
13.	6.27			40.			
14.	7.15			41.			
15.	1.10			42.			
16.	6.57			43.			
17.	3.74			44.			
18.	5.50			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-13-91 Time 0830

Location: Firetraining

Spill # _____

Storage tank level _____ gallons

Recovered to date _____ gal

Pump rate: 32 gpm Tot.gal. pumped 293313 Tot.gal.bailed _____

Well #	DTW	DTP	Product	#	DTW	DTP	Product
1	14.13	19.99	.20	21	1.	13.93	Trace
2	13.	12.92	.08	2.	12.96		
3	12.89	12.86	.03	3.	12.84		
4	15.15			7.	13.58		
5	13.98			9.	17.4		
6	12.74			27			
7	13.72	13.59	.13	28			
8	14.29			29			
9	17.94	17.44	.50	30			
10	14.28			31			
11	19.75			32			
12	15.19			33			
13	15.83			34			
14	15.8			35			
15	15.36			36			
16	17.03			37			
17	13.45			38			
18	12.23			39			
19				40			
20				41			

1	14.13	19.99	.20	21	1.	13.93	Trace
2	13.	12.92	.08	2.	12.96		
3	12.89	12.86	.03	3.	12.84		
4	15.15			7.	13.58		
5	13.98			9.	17.4		
6	12.74			27			
7	13.72	13.59	.13	28			
8	14.29			29			
9	17.94	17.44	.50	30			
10	14.28			31			
11	19.75			32			
12	15.19			33			
13	15.83			34			
14	15.8			35			
15	15.36			36			
16	17.03			37			
17	13.45			38			
18	12.23			39			
19				40			
20				41			

el: 654-4900

MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

Fax: 654-49

84-0011

LOCATION: Calverton Fuel Calibration DATE 4/16/90 TIME 1300

STORAGE TANK LEVEL 1. 63 G 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL 1051 G

PUMPING RATE RW1 OFF RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.23	7.08	-15	24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	4.92			28.			
2.	6.15			29.			
3.	5.08			30.			
4.	6.79			31.			
5.	7.15			32.			
6.	MIS			33.			
7.	7.44			34.			
8.	7.17			35.			
9.	10.46	Trace		36.			
10.	6.31			37.			
11.	6.98			38.			
12.	6.56			39.			
13.	6.88			40.			
14.	8.92			41.			
15.	8.33			42.			
16.	7.39			43.			
17.	6.54			44.			
18.	6.33			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-27-91 Time 0900

Location: Firetraining

Spill # 82-0923

Storage tank level: _____ gallons

Recovered to date _____ gal

Pump rate: .32 gpm Tot.gal. pumped 359.369 Tot.gal.bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
KW				21			

1	14.15	13.98	.17	22	after	baeling	
2	13.15	12.95	.20	1.	14.02	Trace	
3	12.55			2.	13.02	Trace	
4	15.27			7	13.86		
5	14.03			8	13.46		
6	12.82			9	17.63		
7	13.85	13.64	.21	28			
8	14.45	14.44	.01	29			
9	12.68	12.51	.17	30			
10	14.4	Trace		31			
11	19.9			32			
12	15.31			33			
13	15.93			34			
14	15.93			35			
15	15.36			36			
16	17.12			37			
17	13.54			38			
18	13.3			39			
19				40			
20				41			

MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772LOCATION: Cabot Fuel Oil

84-0011

DATE 1/4/90TIME 1200STORAGE TANK LEVEL 1. 63 GAL. 2. _____

3. _____

4. _____

CUMULATIVE TOTAL 1051 GAL.BAILED 0.13 G.PUMPING RATE RW1 62-45-0729

RW2 _____

RW3 _____

RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	2.2	6.95	25	24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	5.43			28.			
2.	6.04			29.			
3.	4.98			30.			
4.	6.69			31.			
5.	7.06			32.			
6.	—			33.			
7.	7.37			34.			
8.	7.08			35.			
9.	6.98	6.24	.14	9.	6.38	Tropane	
10.	6.82			37.			
11.	6.86			38.			
12.	6.97			39.			
13.	7.91			40.			
14.	8.93			41.			
15.	8.26			42.			
16.	7.3			43.			
17.	6.42			44.			
18.	6.21			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910008/2

01/14/91

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keshay

PO# 30-28955

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 01/02/91 RECEIVED: 01/02/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

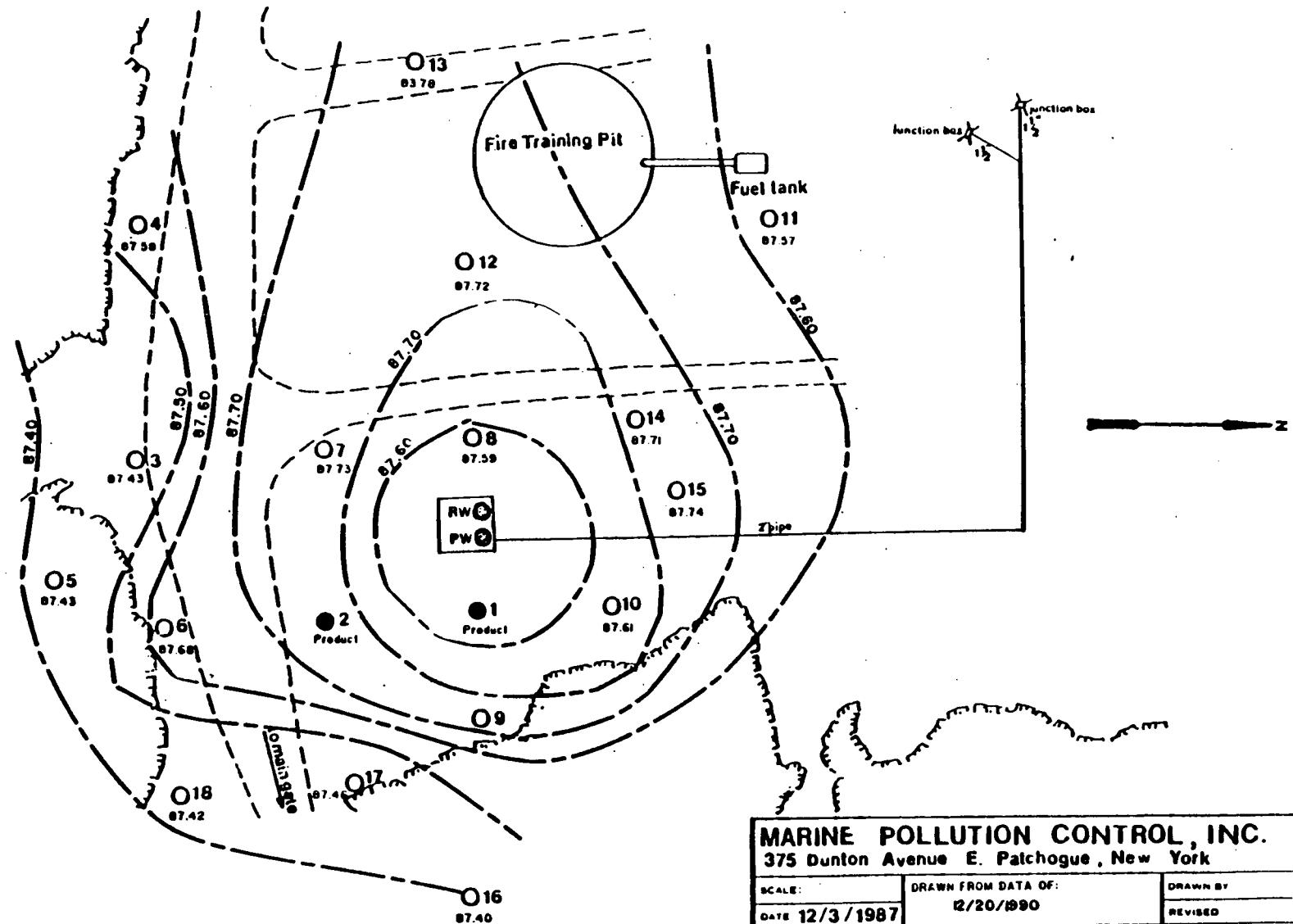
cc: J. Ohlmann, J. Selva, MPC

REMARKS:

DIRECTOR

WELL	TOP OF PIPE ELEVATION
1	101.87
2	100.78
3	100.72
4	103.10
5	101.76
6	100.78
7	101.73
8	102.32
9	100.39
10	102.32
11	107.74
12	103.32
13	100.01
14	103.92
15	103.38
16	104.84
17	101.29
18	100.00

531



MARINE POLLUTION CONTROL, INC.
375 Dunton Avenue E. Patchogue, New York

SCALE: DATE 12/3/1987	DRAWN FROM DATA OF: 12/20/1990	DRAWN BY REVISED
--------------------------	-----------------------------------	---------------------

CALV. FIRE TRAINING

DRAWING NUMBER SPILL: 82-0923

GROUNDWATER CONTOURS AT 32 GPM

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C911049/2

04/05/91

Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keshay

PO# 30-28955

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 03/27/91 RECEIVED: 03/27/91

SAMPLE: Water sample, #82-0923, 1000

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva-GAC, MPC

REMARKS:

DIRECTOR

532

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C911990/2

06/11/91

Grumman Aerospace Corporation
Mail Station A-04-06
Calverton, NY 11933
ATTN: Charles Smith

PO# 30-28955

SOURCE OF SAMPLE: Grumman Aerospace, Calverton
COLLECTED BY: Client DATE COL'D: 05/31/91 RECEIVED: 06/03/91

SAMPLE: Water sample, fire training, 0930

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc:H. Keahey/GAC, J. Goff/MPC

REMARKS:

DIRECTOR

533

NYSDOH ID# 10320

rn#

8558

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C912780/1

08/12/91

Gruuman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keashey

PO# 30-28955

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 07/31/91 RECEIVED: 08/01/91

SAMPLE: Water sample, 9:30

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva-GAC, MPC

REMARKS:

534

DIRECTOR

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C911534

05/09/91

Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keahey

PO# 30-28955

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 04/30/91 RECEIVED: 04/30/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1

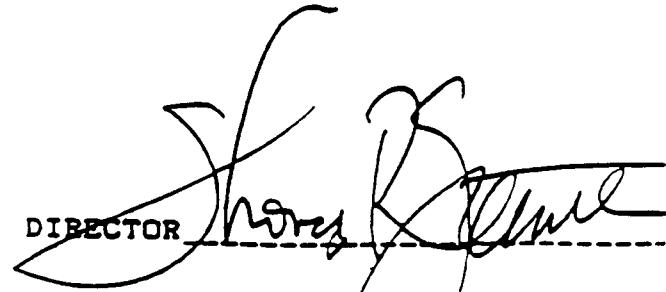
ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. SelvaMPC

REMARKS:

535

DIRECTOR





Grumman - Calverton
Fire Training Area

Prepared by:

MPC Environmental Services
October 11, 1991

P.O. Box 610
460 Edwards Avenue, Calverton, NY 11933
516-369-4900 FAX 516-369-4909
536

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910373/1

02/06/91

Grumman Aerospace Corporation
Mail Station A-03-116
Bethpage, NY 11714

ATTN: Harvey Keshay

PO# 30-28955

SOURCE OF SAMPLE: Fire Training, Calverton
COLLECTED BY: MPC DATE COL'D: 01/31/91 RECEIVED: 01/31/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	2
m + p Xylene	ug/L	7
o Xylene	ug/L	2

ANALYTICAL PARAMETERS

cc: J. Ohmann, John Selva & MPC

REMARKS:

DIRECTOR

537

Tel: 654-4900

MPC ENVIRONMENTAL SERVICES

84-0011

Fax: 654-49

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772LOCATION: Grumman Crv. Fuel Crv Area DATE 1-8-90 TIME 1230STORAGE TANK LEVEL 1. 63 GAL. 2. _____ 3. _____ 4. _____CUMULATIVE TOTAL 1051 GAL.PUMPING RATE RW1 68 GPM RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1:	7.70	7.52	0.18	24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	5.80			28.			
2.	6.59			29.			
3.	3.22			30.			
4.	7.05			31.			
5.	7.35			32.			
6.	-			33.			
7.	7.65			34.			
8.	7.35			35.			
9.	6.59	TRACE		36.			
10.	6.70			37.			
11.	7.27			38.			
12.	7.03			39.			
13.	7.70			40.			
14.	8.75			41.			
15.	8.69			42.			
16.	7.70			43.			
17.	6.70			44.			
18.	6.60			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 10/3/81, Time 084

Location: Germann Calv. Fire TRAINING AREA

Spill # 82-0923

Storage tank level _____ gallons

Recovered to date 234,0 gal.

Pump rate : 32 gpm Tot. gal. pumped 386854 Tot. gal. bailed .25

KW	OTW	DTP	Product #	OTW	DTP	Product
1	14.32	14.10	0.02	22	14.14	TRACE
2	13.12	13.10	0.02	23	13.11	TRACE
3	13.07	13.05	0.02	24	13.05	TRACE
4	15.36			25	13	
5	14.15			26		
6	12.91			27		
7	13.85	13.75	0.10	28	13.77	TRACE
8	14.50	TRACE		29		
9	17.61			30		
10	14.48			31		
11	19.96			32		
12	15.40			33		
13	16.01			34		
14	16.00			35		
15	15.46			36		
16	17.22			37		
17	13.65			38		
18	12.39			39		
19				40		
20				41		

MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Cab. Fuel Calibration DATE 1/23/90 TIME 1200
 STORAGE TANK LEVEL 1. 63 G 2. _____ 3. _____ 4. _____
 CUMULATIVE TOTAL 1051 G

PUMPING RATE RW1 OFF

RW2

RW3

RW4

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>71</u>	<u>6.96</u>	<u>.14</u>	24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	<u>4.46</u>			28.			
2.	<u>5.85</u>			29.			
3.	<u>4.92</u>			30.			
4.	<u>6.7</u>			31.			
5.	<u>7.06</u>			32.			
6.	<u>—</u>			33.			
7.	<u>7.38</u>			34.			
8.	<u>7.09</u>			35.			
9.	<u>5.53</u>	<u>Trace</u>		36.			
10.	<u>6.24</u>			37.			
11.	<u>6.88</u>	<u>Trace</u>		38.			
12.	<u>6.48</u>			39.			
13.	<u>6.79</u>			40.			
14.	<u>8.35</u>			41.			
15.	<u>8.28</u>			42.			
16.	<u>7.31</u>			43.			
17.	<u>6.46</u>			44.			
18.	<u>6.25</u>			45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
				50.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9/20/91 Time 0900

Location: Gummere CALV. FIRE TRAINING AREA Spill #: 82-0923

Storage tank level _____ gallons Recovered to date _____ gal.

Pump rate : 33 gpm Tot.gal. pumped 327514 Tot.gal.bailed _____

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product #	DTW	DTP	Product
RW				18		1230
1	14.15	14.05	0.10	19		
2	13.05	TRACE				TRACE BAILED
3	12.99	TRACE		1	14.09	TRACE
4	15.29			7	13.72	TRACE
5	14.06			23		
6	12.85			24		
7	13.80	13.70	0.10	25		
8	14.44	TRACE		26		
9	17.55	TRACE		27		
10	14.40			28		
11	19.90			29		
12	15.30			30		
13	15.95			31		
14	15.94			32		
15	15.38			33		
16	17.15			34		
17	13.57			35		



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman CALV Fuel Cal SPILL # 84-0011 DATE 3-7-90 TIME 1115
STORAGE TANK LEVEL 1 63. G. 2 _____
CUMULATIVE TOTAL 105 1 GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.30			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	3.50			30			
2	5.11			31			
3	4.20			32			
4	6.01			33			
5	6.39			34			
6	—			35			
7	6.67			36			
8	6.44			37			
9	4.79	TRACE		38			
10	5.50			39			
11	6.18	TRACE		40			
12	6.79			41			
13	6.37			42			
14	7.65			43			
15	7.59			44			
16	6.60			45			
17	5.77			46			
18	5.55			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-6-91 Time 0900

Location: Geuman CALV. Fire TRAINING AREA Spill #: 82-0923

Storage tank level _____ gallons Recovered to date _____ gal.

Pump rate : 33 gpm Tot.gal. pumped 262461 Tot.gal.bailed 10

RW	DTW	DTP	Product #	DTW	DTP	Product
				AFTER BAILED		
1	13.95	13.85	0.10	22	13.87	13.86 0.01
2	12.84	TRAUE		23		
3	12.77	TRAUE		24		
4	15.08			25		
5	13.87			26		
6	12.62			27		
7	13.50	13.47	0.03	28	13.48	TRAUE
8	14.25	TRAUE		29		
9	17.35	TRAUE		30		
10	14.20			31		
11	19.69			32		
12	15.10			33		
13	15.75			34		
14	15.75			35		
15	15.50			36		
16	16.95			37		
17	13.37			38		
18	12.09			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Collection Fuel Cst. SPILL# 84-0011 DATE 2-23-90 TIME 1100
STORAGE TANK LEVEL 1 63 G. 2.
CUMULATIVE TOTAL 1051 G. GALLONS BAILED 0.06 G.

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	720	Trace		22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29	AFTER	rating	
1	4.34			30			
2	6.13			31			
3	4.02			32			
4	6.67			33			
5	6.97			34			
6	-			35			
7	2.10			36			
8	6.82			37			
9	4.97	4.95	.02	38	6.70		
10	6.21			39			
11	6.90	6.88	.02	40	7.33		
12	6.61			41			
13	6.78			42			
14	8.26			43			
15	8.22			44			
16	7.26			45			
17	6.35			46			
18	6.19			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-22-91 Time 0830

Spill # 82-0923

Location: Grumman Calv. Fire Training Area

Storage tank level 73 gallons

Recovered to date 234 gal.

Pump rate : 32 gpm Tot.gal. pumped 1924070 Tot.gal.bailed 1646

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				-			<i>AFTER BAILEYS</i>
1	13.75	13.52	0.23	1	13.60	TRACE	
2	12.70	12.52	0.18	2	12.58	TRACE	
3	12.63	12.50	0.13	3	12.58	12.57	0.01
4	14.85						
5	13.57						
6	12.32						
7	13.31	13.21	0.10	7	13.25	TRACE	
8	13.98			25			
9	17.00	TRACE		27			
10	14.27			28			
11	19.50			29			
12	14.90			30			
13	15.58			31			
14	15.50			32			
15	14.90			33			
16	16.60			34			
17	13.02			35			
18	11.75						



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gruuman Calv. Fuel Ctr. SPILL # 84-0011 DATE 3-5-90 TIME 1030
STORAGE TANK LEVEL 1. 6.3 G. 2. _____
CUMULATIVE TOTAL 1051 G. GALLONS BAILED _____
Flowmeter #1. 77 Gpm Gallons Pumped 473886

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.38	TRACE		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.25			30			
2	6.35			31			
3	5.35			32			
4	6.88			33			
5	7.20			34			
6	-			35			
7	7.35			36			
8	7.08			37			
9	6.22	TRACE		38			
10	6.50			39			
11	7.11			40			
12	6.82			41			
13	7.45			42			
14	8.50			43			
15	8.47			44			
16	7.47			45			
17	6.60			46			
18	6.42			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-9-91 Time 1000

Location: Germany Caw Fire Training Area

Spill #: 820923

Storage tank level 71.50 gallons

Recovered to date 232.50 gal.

Pump rate : 33 gpm Tot.gal. pumped _____ Tot.gal.bailed 50

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well# DTW DTP Product # DTW DTP Product

RW	DTW	DTP	Product	#	DTW	DTP	Product
1	14.41	14.21	0.30	19			
2	13.45	13.21	0.24	20			
3	13.17	TRACE		21			
4	15.45			22			AFTER RAINED
5	14.35			23	1	17.24	TRACE
6	13.05			24	2	13.25	13.24 0.01
7	13.87	TRACE		25	9	17.79	TRACE
8	14.06			26			
9	17.85	17.75	0.10	27			
10	14.60			28			
11	20.05			29			
12	15.47			30			
13	16.10			31			
14	16.11			32			
15	15.57			33			
16	17.36			34			
17	13.77			35			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fuel Col SPILLS 94-0011 DATE 3/23/92 TIME 1430
STORAGE TANK LEVEL 1 6.3 G. 2 _____
CUMULATIVE TOTAL 1051 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.9</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>4.84</u>			30			
2	<u>5.9</u>			31			
3	<u>4.89</u>			32			
4	<u>6.6</u>			33			
5	<u>6.96</u>			34			
6	<u>—</u>			35			
7	<u>7.26</u>			36			
8	<u>6.98</u>			37			
9	<u>5.6</u>			38			
10	<u>6.15</u>			39			
11	<u>6.78</u>	<u>Trace</u>		40			
12	<u>6.39</u>			41			
13	<u>7.06</u>			42			
14	<u>8.29</u>			43			
15	<u>8.16</u>			44			
16	<u>7.2</u>			45			
17	<u>6.35</u>			46			
18	<u>6.17</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-26-91 Time 1030

Location: Grimmam Firetraining Spill #: 82-0923

Storage tank level 70.50 gallons

Recovered to date 231.50 gal.

Pump rate: 33 gpm Tot. gal. pumped 0689750 Tot. gal. bailed .50

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				18	12.37		
1	14.19	1.9.98	.21	19			
2	13.17	1.8.	.17	20	<u>after bailing</u>		
3	12.97	12.92	.05	1	14.03		
4	15.22			2	13.01		
5	14.01			3	12.93	Trace	
6	12.81			7	13.67		
7	13.72	13.64	.08	9	17.51		
8	14.4			25			
9	17.6	17.48	.12	27			
10	14.39			28			
11	19.8			29			
12	15.25			30			
13	15.9			31			
14	15.88			32			
15	15.32			33			
16	17.11			34			
17	13.54			35			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Geumman Fuel Oil Acres SPILLS 84-0011 DATE 4/5/90 TIME 1100
STORAGE TANK LEVEL 1 6.3 G. 2 _____
CUMULATIVE TOTAL 11516. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.20			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.05			30			
2	6.01			31			
3	4.82			32			
4	6.65			33			
5	6.95			34			
6	—			35			
7	7.15			36			
8	7.85			37			
9	5.15			38			
10	6.23			39			
11	6.87	TRACE		40			
12	6.57			41			
13	6.90			42			
14	8.27			43			
15	8.24			44			
16	7.25			45			
17	6.35			46			
18				47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 309-4900

Date 7-10-91 Time 1330

Location: Grimman Law. Fire TRAINING AREA Spill # 82-0923

Storage tank level 60.83 gallons Recovered to date 221.87 gal

Pump rate: 32 gpm Tot. gal. pumped 003174 Tot. gal. bailed .20

Well #	DTW	DTP	Product #	DTW	DTP	Product
--------	-----	-----	-----------	-----	-----	---------

KW						AFTER BAILED
1	14.05	13.85	0.20	1	13.89	13.88 0.01
2	12.90	TRACE				
3	12.82	12.78	0.04	3	12.78	TRACE
4	15.05			25		
5	13.90			26		
6	12.68			27		
7	13.50	TRACE		28		
8	14.30			29		
9	17.55	TRACE		30		
10	14.22			31		
11	19.65			32		
12	15.10			33		
13	15.70			34		
14	15.75			35		
15	15.20			36		
16	17.76			37		
17	13.43			38		
18	12.20			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: GARAGE COLD TANK FLOOR SPILL SPILL #87-C-011 DATE 1-17-90 TIME 13:00
STORAGE TANK LEVEL 1 63 G. 2 _____
CUMULATIVE TOTAL 1051 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.27			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	3.25			30			
2	- - - 1			31			
3	3.84			32			
4	6.01			33			
5	6.38			34			
6	-			35			
7	6.67			36			
8	6.39			37			
9	4.31	TAKE		38			
10	5.47			39			
11	6.19			40			
12	5.19			41			
13	6.17			42			
14	7.15			43			
15	7.17			44			
16	6.61			45			
17	5.76			46			
18	5.64			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-21-91 Time 0830

Location: GRIMM, MAN CAL FIRE TRAIN AREA Spill # 82-0923

Storage tank level 60.13 gallons

Recovered to date 221.17 gal.

Pump rate : 31 gpm Tot.gal. pumped 962771 Tot.gal.bailed .25

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW							
1	13.80	13.52	0.28				
2	12.60	TRACE					
3	14.47	TRACE					AFTER BAILED
4	14.71				1	13.58	TRACE
5	13.57						
6	12.35						
7	13.17	TRACE					
8	13.92	TRACE					
9	17.00			27			
10	13.90			28			
11	19.30			29			
12	14.75			30			
13	15.38			31			
14	15.42			32			
15	14.85			33			
16	16.70			34			
17	13.10			35			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fuel Col.

SPILLS 84-0011

DATE 5/2/90

TIME 1:300

STORAGE TANK LEVEL 1

63%

2.

CUMULATIVE TOTAL

10516.

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	6.68			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.79			30			
2	5.64			31			
3	4.66			32			
4	6.39			33			
5	6.75			34			
6	—			35			
7	7.04			36			
8	6.75			37			
9	5.88	Trace		38			
10	5.9			39			
11	6.57	Trace		40			
12	6.14			41			
13	6.84			42			
14	8.03			43			
15	7.95			44			
16	7.			45			
17	6.14			46			
18	5.94			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-7-91 Time 1000

Location: GRUMMAN CALU FIRE TRAINING AREA Spill #: 82-0923

Storage tank level 59.76 gallons Recovered to date 220.80 gal.

Pump rate: 33 gpm Tot. gal. pumped 837822 Tot. gal. bailed .25

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product #	DTW	DTP	Product
-------	-----	-----	-----------	-----	-----	---------

RW						<u>AFTER BAILED</u>
1	13.70	13.40	0.30	1	13.50	13.46 0.04
2	12.45			20		
3	12.30	TRACE		21		
4	14.55			22		
5	13.42			23		
6	12.20			24		
7	13.02			25		
8	13.75			26		
9	16.95			27		
10	13.80			28		
11	19.15			29		
12	14.59			30		
13	15.20			31		
14	15.25			32		
15	14.71			33		
16	16.58			34		
17	12.97			18	11.75	



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fuel Col.

SPILL # 84-0011

DATE 5/17/00 TIME 11:30

STORAGE TANK LEVEL 1 63 G.

2

CUMULATIVE TOTAL 1051 G.

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.9</u>	<u>Trace</u>		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>4.07</u>			30			
2	<u>5.75</u>			31			
3	<u>3.26</u>			32			
4	<u>6.46</u>			33			
5	<u>6.8</u>			34			
6	<u>—</u>			35			
7	<u>6.95</u>			36			
8	<u>6.64</u>			37			
9	<u>7.5</u>			38			
10	<u>6.</u>			39			
11	<u>6.64</u>	<u>Trace</u>		40			
12	<u>6.4</u>			41			
13	<u>5.7</u>			42			
14	<u>8.12</u>			43			
15	<u>8.08</u>			44			
16	<u>7.12</u>			45			
17	<u>6.14</u>			46			
18	<u>5.95</u>			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. Box 610

Calverton, NY 11933

Tel: (516) 369-1900

Geunnman Call

Location FIRE PENNINING Area Spill # 82-0923 Date 24-91 Time 11:00Storage tank level 59.45 gal Cumulative total 1220.49 Total gallons bailed 30umping rate 30 gpm Total gallons pumped 792570 Pressure psiAir Stripper Blower ON/OFF Temp fpm Battery II Venting System ON/OFF Temp fpm Battery pool Levels 1 2

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				10	11.58		
1	13.45	13.27	0.18	19			
2	12.32			20			
3	12.21			21			
	14.41			22			
5	13.30			23			
6	12.10			24			
7	12.90	TRACE		25			
8	13.65			26			
9	16.85			27			
10	13.62			28			
11	19.00			29			
12	14.70			30			
13	15.05						AFTER BAILEING
14	15.15						
15	14.60				1	13.30	TRACE
16	16.50						
17	12.85						



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton - Fuel Pal.

SPILLS 84-0011

DATE 6/1/90 TIME 1330

STORAGE TANK LEVEL 1 6.3 G.

2.

CUMULATIVE TOTAL 1051 G

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	<u>6.73</u>			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	<u>4.77</u>			30			
2	<u>5.68</u>			31			
3	<u>4.7</u>			32			
4	<u>6.29</u>			33			
5	<u>6.59</u>			34			
6	<u> </u>			35			
7	<u>6.78</u>			36			
8	<u>6.49</u>			37			
9	<u>5.47</u>	<u>Trace</u>		38			
10	<u>5.85</u>			39			
11	<u>6.48</u>	<u>Trace</u>		40			
12	<u>6.38</u>			41			
13	<u>6.82</u>			42			
14	<u>7.89</u>			43			
15	<u>7.84</u>			44			
16	<u>6.89</u>			45			
17	<u>5.98</u>			46			
18	<u>5.78</u>			47			
19				48			
20				49			
21				50			

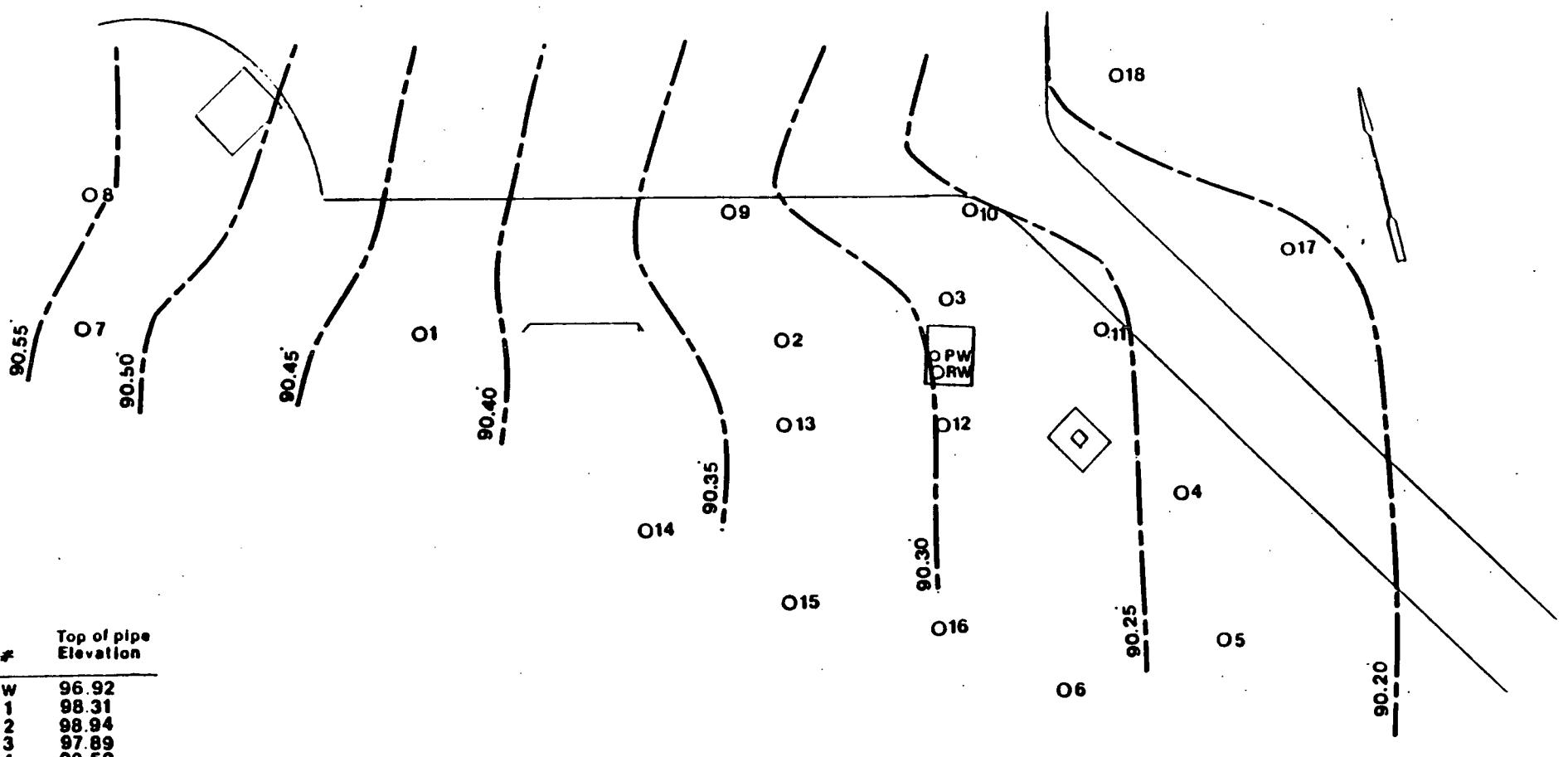


Grumman - Calverton
Fuel Calibration Area

Prepared by:

**MPC Environmental Services
October 11, 1991**

P.O. Box 610
460 Edwards Avenue, Calverton, NY 11933
516-369-4900 FAX 516-369-4909



005

Well #	Top of pipe Elevation
RW	96.92
1	98.31
2	98.94
3	97.89
4	99.50
5	99.81
6	
7	100.39
8	100.20
9	99.33
10	99.17
11	99.77
12	99.28
13	100.00
14	101.16
15	101.06
16	100.06
17	99.24
18	99.12

MARINE POLLUTION CONTROL
375 Dunton Avenue E. Patchogue, New York

SCALE 1" = 30'
DATE 12/3/1987

APPROVED BY:

DRAWN BY

REVISED

CALVERTON FUEL CAL.

GROUND WATER CONTOUR MAP
Contour drawn according to relative elevation

DRAWING NUMBER

Spill 84-0011

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C912780/2

08/12/91

**Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714**

ATTN: Harvey Keehey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calibration, Calverton

COLLECTED BY: MPC DATE COL'D: 07/31/91 RECEIVED: 08/01/91

SAMPLE: Water sample, 10:30

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<2
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	<4

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva-GAC, MPC

REMARKS:

DIRECTOR

561

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C911990/1

06/11/91

Grumman Aerospace Corporation
Mail Station A-04-06
Calverton, NY 11933

ATTN: Charles Smith

PO# 30-28955

SOURCE OF SAMPLE: Grumman Aerospace, Calverton
COLLECTED BY: Client DATE COL'D: 05/31/91 RECEIVED: 06/03/91

SAMPLE: Water sample, fuel cal. area, 0900

ANALYTICAL PARAMETERS

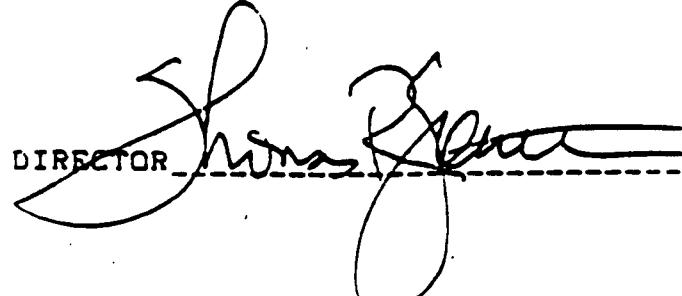
Benzene	ug/L	1
Toluene	ug/L	4
Ethyl Benzene	ug/L	<1
m Xylene	ug/L	<2
o+p Xylene	ug/L	22

ANALYTICAL PARAMETERS

cc:H. Keahay/GAC, J. Goff/MPC

REMARKS:

DIRECTOR


Thomas R. Goff

562

rn#

8557

NYSDOH ID# 10320



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 10/3/94 Time 0945

Spill # 84-001f

Location: German Car. Fuel Car. Area

Storage tank level _____ gallons

Recovered to date 180.7 gal.

Pump rate : _____ qpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well#	DTW	DTP	Product #	DTW	DTP	Product
KW	7.88	7.70	0.18	21		
1	6.60			22		
2	6.77			23		
3	5.75			24		
4	7.40			25		
5	7.74			26		
6	—			27		
7	7.90			28		
8	7.60			29		
9	7.07			30		
10	6.95			31		
11	7.60	TRACE		32		
12	7.25			33		
13	7.90	TRACE		34		
14	8.96			35		
15	8.91			36		
16	7.95			37		
17	7.16			38		
18	6.96			39		
19				40		
20				41		

ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910008/1

01/14/91

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keahey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calibration, Calverton
COLLECTED BY: MPC DATE COL'D: 01/02/91 RECEIVED: 01/02/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	6

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Salva, MPC

REMARKS:

DIRECTOR

564

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910373/2

02/06/91

Grumman Aerospace Corporation
Mail Station A-03-116
Bethpage, NY 11714
ATTN: Harvey Keahey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calibration, Calverton
COLLECTED BY: MPC DATE COL'D: 01/31/91 RECEIVED: 01/31/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS		
Benzene	ug/L	2
Toluene	ug/L	4
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	6
o Xylene	ug/L	11

ANALYTICAL PARAMETERS

cc: J. Ohlmann, John Selva & MPC

REMARKS:

DIRECTOR _____

565

rn=

1500

NYSDOH ID# 10320

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C911049/1

04/05/91

Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keashey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calibration, Calverton
COLLECTED BY: MPC DATE COL'D: 03/27/91 RECEIVED: 03/27/91

SAMPLE: Water sample, #84-0011, 1200

ANALYTICAL PARAMETERS

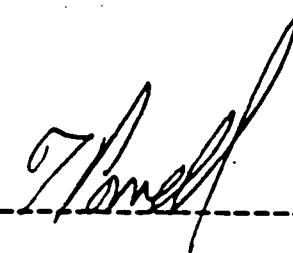
Benzene	ug/L	1
Toluene	ug/L	2
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	33
o Xylene	ug/L	11

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Selva-GAC, MPC

REMARKS:

DIRECTOR



ECOTEST LABORATORIES, INC.

ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910008/1

01/14/91

Grumman Aerospace Corporation
Mail Station A03-12
Bethpage, NY 11714
ATTN: Harvey Keesey

PO# 30-28955

SOURCE OF SAMPLE: Fuel Calibration, Calverton
COLLECTED BY: MPC DATE COL'D: 01/02/91 RECEIVED: 01/02/91

SAMPLE: Water sample

ANALYTICAL PARAMETERS

Benzene	ug/L	1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	6

ANALYTICAL PARAMETERS

cc: J. Ohlmann, J. Salva, MPC

REMARKS:

DIRECTOR



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9/20/81 Time 1015
Spill # 84-0011

Location: Geumman Crw. Fuel Oil Area

Storage tank level _____ gallons

Recovered to date _____ gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed .05

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product #	DTW	DTP	Product
-------	-----	-----	-----------	-----	-----	---------

4	7.92	7.75	0.17	18	7.00	
1	6.40			19		
2	6.80			20		
3	5.80			21		
4	7.45			22		
5	7.77			23		
6	—			24		
7	7.90			25		
8	7.63			26		
9	6.85					<u>AFTER BAILED</u>
10	6.99					
11	7.75	7.65	0.10		7.68	
12	7.30			30		
13	7.93	7.92	0.01	31		
14	9.00			32		
15	8.95			33		
16	8.00			34		
17	7.21			35		


NPG ENVIRONMENTAL SERVICES
 P.O. Box 610 Colverton, NY 11933
 NPG Tel: (516) 399-4900

Date 9-27-91 Time 1200

Serial # 84-0011

Scourge tank level _____ gallons Recovered to date _____ gal.

Pump rate : on gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well# OTW OTP Product II OTW OTP Product

1	7.52	7.48	.04	21			
2	5.49			22			
3	6.32			23			
4	5.5			24			
5	7.18			25			
6	7.5			26			
7	—			27			
8	7.64			28			
9	7.34			29			
10	6.66			30			
11	6.68			31			
12	7.34	Trace		32			
13	7.03			33			
14	7.62	Trace		34			
15	8.74			35			
16	8.7			36			
17	7.76			37			
18	6.92			38			
19	6.71			39			
20				40			
				41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-6-91 Time 1045

Location: Grumman CWL Fuel Ctl. Area Spill #

Storage tank level gallons Recovered to date gal.

Pump rate : gpm Tot.gal. pumped Tot.gal.bailed .25

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW	DTW	DTP	Product	#	DTW	DTP	Product
1	7.42	7.35	0.07	21			
1	5.52			22			
2	5.75			23			
3	5.27			24			
4	7.03			25			
5	7.37			26			
6	—			27			
7	7.51			28			
8	7.21			29			
9	6.47			30			
10	6.55			31			
11	7.55	7.15	0.40	32	7.27	7.25	0.02
12	6.89			33	7.52		
13	7.57	7.50	0.07	34			
14	8.60			35			
15	8.55			36			
16	7.60			37			
17	6.77			38			
18	6.60			39			
19				40			
20				41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-13-91 Time 1300

Location: Fuel Calibration Spill #: _____

Storage tank level _____ gallons Recovered to date _____ gal.

Pump rate: on gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Air Stripper Blower: UN/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: UN/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Wells DTW DTP Product # DTW DTP Product

RW	DTW	DTP	Product #	DTW	DTP	Product
1	<u>7.74</u>	<u>7.58</u>	.16	18	<u>6.88</u>	
1	<u>6.76</u>			19		
2	<u>6.68</u>			20		
3	<u>5.65</u>			21		
4	<u>7.31</u>			22		
5	<u>7.65</u>			23		
6	—			24		
7	<u>7.8</u>			25		
8	<u>7.52</u>			26		
9	<u>7</u>			27		
10	<u>6.85</u>			28	<u>after bailing</u>	
11	<u>7.54</u>	<u>7.47</u>	.07	11.	<u>7.44</u>	
12	<u>7.15</u>			30		
13	<u>7.85</u>	<u>7.78</u>	.07	13.	<u>7.86</u>	
14	<u>8.86</u>			32		
15	<u>8.81</u>			33		
16	<u>7.85</u>			34		
17	<u>7.05</u>			35		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8/22/91 Time 1130

Location: Grumman CW: Fuel Depot Area

Spill #: 82-1680

Storage tank level _____ gallons

Recovered to date 110.55 gal.

Pump rate : _____ qpm Tot.gal. pumped _____ Tot.gal.bailed _____

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW					18	15.27	
1	16.30	TRACE			19	14.06	
2	15.09				20	13.69	
3	14.90				21	14.40	
4	17.35				22	14.20	
5	17.00				23	15.00	
6	16.15				24	14.20	
7	16.14				25	14.77	
8	DRY				26	14.65	
9	16.95				27	11.85	
10	18.00				28	14.59	
11	17.24				29	14.30	
12	18.51				30	14.40	
13	14.47				A	15.27	
14	15.50				B	15.36	
15	14.80				C	16.41	
16	15.17				D	17.20	
17	15.10				35		

RW					18	15.27	
1	16.30	TRACE			19	14.06	
2	15.09				20	13.69	
3	14.90				21	14.40	
4	17.35				22	14.20	
5	17.00				23	15.00	
6	16.15				24	14.20	
7	16.14				25	14.77	
8	DRY				26	14.65	
9	16.95				27	11.85	
10	18.00				28	14.59	
11	17.24				29	14.30	
12	18.51				30	14.40	
13	14.47				A	15.27	
14	15.50				B	15.36	
15	14.80				C	16.41	
16	15.17				D	17.20	
17	15.10				35		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-30-91 Time 1100

Location: Gulchabration

Spill #: 84-0011

Storage tank level _____ gallons

Recovered to date _____ gal.

Pump rate: on gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well # OTW DTP Product # OTW DTP Product

OTW	DTW	Product	#	OTW	DTW	Product
1	7.97	7.27	.10	21		
1	6.33			22		<i>after bailing</i>
2	6.37			23		
3	5.33			13	8.13	Trace
4	6.98			25		
5	7.39			26		
6	—			27		
7	7.47			28		
8	7.18			29		
9	6.64	Trace		30		
10	6.51			31		
11	7.08			32		
12	6.88			33		
13	8.33	7.29	1.04	34		
14	8.54			35		
15	8.48			36		
16	7.54			37		
17	6.72			38		
18	6.52			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-9-91 Time 0930

Location: Grumman GAW Fuel Depot Area Spill # 82-1680

Storage tank level _____ gallons Recovered to date 110,51 gal.

Pump rate : _____ gpm Tot. gal. pumped _____ Tot. gal. bailed 0

Air stripper blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well #	DTW	DTP	Product #	DTW	DTP	Product
-W				18	16.17	
1	17.22			19	14.95	
2	15.98			20	14.55	
3	15.84			21	15.95	
4	18.25			22	15.07	
5	17.90			23	15.90	
6	17.06			24	15.10	
7	17.05			25	15.64	
	DRY			26	15.51	
	17.82 TRACE			27	12.73	
10	18.90			28	15.50	
11	18.15			29	15.20	
12	19.45 TRACE			30	15.35	
13	15.42			A	15.19	
14	16.37			B	15.29	
15	15.70			C	17.32	
16	16.10			D	18.11	
17	16.00			35		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11935
Tel: (516) 569-4900

Date 8-16-91 Time 10:30

Location: Fuel Depot, Calverton Grumman SP111 # 82-1680
Storage tank level _____ gallons Recovered to date 110.55 gal.
Pump rate: _____ gpm Tot. gal. pumped _____ Tot. gal. bailed 0.04

Well	DTW	OTP	Product	DTW	OTP	Product
1	171			21	14.42	
2	16.52			22	14.94	
3	15.72			23	15.75	
4	18.87			24	14.98	
5	17.74			25	15.52	
6	16.93			26	15.39	
7	16.92			27	12.16	
8	DRY			28	15.38	
9	17.74	17.67	.07	30	15.29	
10	18.75			A	16.32	
11	18.			B	16.15	
12	19.3			C	17.19	
13	15.3			D	17.96	
14	16.26			35		
15	15.56			36		
16	15.97			37		after bailing
17	15.85			9	17.69	Trace
18	16.02			38		
19	14.8			40		
20	15.81			41		



MPC ENVIRONMENTAL SERVICES

P.O. Box 610 Calverton, NY 11933

Tel: (516) 569-4906

Date 7-26-91 Time 1100Spill # 82-1680Location: Gummans - Fuel Depot

Storage tank level _____ gallons

Recovered to date 110.49 gal.Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed .12

Well# OTW DTP Product # OTW DTP Product

Well#	OTW	DTP	Product #	OTW	DTP	Product
1	17.06			21	14.36	
2	15.82			22	14.94	
3	15.66			23	15.66	
4	18.07			24	14.92	
5	17.67	Trace		25	15.15	
6	16.9			26	15.33	
7	16.87			27	12.52	
8	DRY			28	15.32	
9	17.77	17.69	14	29	15.05	
10	18.7			30	15.17	
11	17.92	Trace		A	15.96	
12	19.25			B	16.1	
13	15.26			C	17.19	
14	16.2			D	17.93	
15	15.51					after bailing
16	15.99			9.	12.67	
17	15.78					
18	15.99					
19	14.74					
20	15.76					



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-31-91 Time 1145

Location: Grumman Calv. Fuel Depot Area

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date 110.51 gal.

Pump rate : _____ gpm Tot. gal. pumped _____ Tot. gal. bailed 0.02

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				18	16.10		
1	17.19			19	14.83		
2	15.08			20	14.46		
3	15.79			21	15.88		
4	18.19			22	15.02		
5	17.83	TRACE		23	15.79		
6	16.99			24	15.01		
7	16.97			25	15.56		
8	DRY			26	15.42		
9	17.83	17.79	0.04	27	12.62		
10	18.81			28	15.43		
11	18.04	TRACE		29	15.29		
12	19.34	TRACE		30	15.16		
13	15.37			A	16.13		
14	16.32			B	16.22		
15	15.62			C	17.25		
16	16.02			D	18.04		
17	15.91						



MPC ENVIRONMENTAL SERVICES
P.O. Box 616 Calverton, NY 11933
Tel: (516) 309-4900

Date 7-10-91 Time 1245

Spill # 84-0011

Location: Grumman Can. Fuel Cal-Area

Storage tank level 129.15 gallons

Recovered to date 117.15 gal.

Pump rate: ON gpm

Tot. gal. pumped _____

Tot. gal. bailed .50

Well #	DTW	OTP	Product #	DTW	OTP	Product
KW	8.45	8.35	0.10	21		
1	6.95			22		
2	7.35			23		
3	6.35			24		
4	7.95			25		
5	8.30			26		
6	—					
7	8.39					
8	8.10					
9	7.64					AFTER BAILED
10	7.55					
11	8.32	8.12	0.20	11	8.17	TRACE
12	7.84					
13	8.59	8.30	0.29	13	8.35	TRACE
14	9.50			35		
15	9.45			36		
16	8.50			37		
17	7.70			38		
18	7.53			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-17-91 Time 1230

Location: Gerrard's Calvert Fuel Calibration Spill # 84-0011

Storage tank level 175 gallons + corrections Recovered to date 1163 gal.

Pump rate : CW qpm Tot.gal. pumped 299876 Tot.gal.bailed .75

Well#	DTW	DTP	Product #	DTW	DTP	Product
-------	-----	-----	-----------	-----	-----	---------

KW	8/1	8.45	.16			
1	758					
2	7.46					
3	6.44					
4	8.09					
5	8.45					
6	-					
7	8.52					
8	Sampling					
9	775					
10	7.64					AFTER rinsing
11	8.41	836	.15	11	8.76	
12	7.94					
13	9.06	831	.75	13	10.28	1018 .11)
14	9.64					
15	9.59					
16	8.66					
17	7.81					
18	7K3					
19						
20						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-21-91 Time 0945

Spill # 84-0011

Location: Gemmen L & W Fuel Oil Area

Storage tank level 128.55 gallons

Recovered to date 116.55 gal.

Pump rate : ON fpm Tot. gal. pumped _____ Tot. gal. bailed 0.10

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW	8.04	7.97	0.07	18	7.11		
	7.02						
2	6.99						
3	5.95						
4	7.55						AFTER BAILED
5	7.90				RW	8.04	0.07
6	—						
7	8.00						
8	7.72						
9	7.18						
10	7.15						
11	7.76						
12	7.45						
13	8.05						
14	9.12						
15	9.08						
16	8.12						
17	7.30						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-27-91 Time 1000

Location: Calverton - Fuel Calibration Spill #: 84-0011

Storage tank level 128.65 gallons Recovered to date 116.65 gal.

Pump rate: 20 gpm Tot. gal. pumped _____ Tot. gal. bailed 0.10

Well #	DTW	DTP	Product #	DTW	DTP	Product
--------	-----	-----	-----------	-----	-----	---------

KW	DTW	DTP	Product #	DTW	DTP	Product
1	8.15	8.02	.19			
2	7.17					<i>After Bailing</i>
3	7.05			P.W.	8.1	.04
4	6.04					
5	7.65					
6	7.98					
7	—					
8	8.1					
9	7.84					
10	7.36					
11	7.24					
12	7.87					
13	7.57					
14	8.17					
15	9.2					
16	9.16					
17	8.22					
18	7.41					
19	7.22					
20						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-7-91 Time 1130

Spill # 84-0011

Location: Germann Can. Fuel Cal. Area

Storage tank level 128.45 gallons

Recovered to date 1116.45 gal.

Pump rate: ON gpm Tot. gal. pumped 799876 Tot. gal. bailed 0

Air Scrubber Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW	7.87	7.80	0.07	18	6.87		
1	6.19			19			
2	6.75			20			
3	5.70			21			
4	7.31			22			
5	7.65			23			
6	—			24			
7	7.80			25			
8	7.50			26			
9	6.95			27			
10	6.90			28			
11	7.55			29			
12	7.20			30			
13	7.80			31			
14	8.90			32			
15	8.84			33			
16	7.90			34			
17	7.05			35			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-14-91 Time 1100

Location: Calverton - Fuel Pollution

Spill #: 84-0011

Storage tank level 128.45 gallons

Recovered to date 116.45 gal.

Pump rate: on gpm Tot.gal. pumped — Tot.gal.bailed —

Air Stripper Blower: ON/OFF — fpm — temp — battery —

Soil Venting System: ON/OFF — fpm — temp — battery —

Pool Levels (feet): Pool 1 — Pool 2 —

Well#	DTW	DTP	Product #	DTW	DTP	Product
1 RW	7.8	Trace	18	6.97		
1	6.8		19			
2	6.84		20			
3	5.8		21			
4	7.44		22			
5	7.26		23			
6	—		24			
7	7.98		25			
8	7.6		26			
9	7.06		27			
10	6.98		28			
11	7.62		29			
12	7.3		30			
13	7.9		31			
14	9		32			
15	8.95		33			
16	9		34			
17	7.15		35			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Action Fuel Celebration Spill # 84-0011 Date 5-31-92 Time 1800
Average tank level 128.45 gal Cumulative total 1116.45 Total gallons bailed 0.20
Pumping rate 0.01 gpm Total gallons pumped ----- Pressure ----- psi
Stripper Blower ON/OFF ----- Temp ----- fpm ----- Battery -----
Venting System ON/OFF ----- Temp ----- fpm ----- Battery -----

Well#	DTW	DTP	Product	#	DTW	DTP	Product
1	7.58	7.35	.29				
1	5.8			17	6.8		
	6.38			18	6.63		
	5.3			19			
	2.05			20			
	7.4			21			
6	---			22			
	7.62			23			
8	7.34			24			
	6.65			25			
1	6.57			26			
1	7.95			27			
2	6.82			AFTER BAILEING			
3	7.17			#	DTW	DTP	Product
4	8.64			P.W)	7.44	7.96	.08
5	8.6						
6	7.65						


MPC ENVIRONMENTAL SERVICES
 P.O. Box 610
 Calverton, NY 11935
 Tel: (516) 369-4900

Geumann CALV.

Location FIRE CELL AREA Spill # 84-0011 Date 5-24-91 Time 1200
 Large tank level 128.25 gal Cumulative total 116.25 Total gallons bailed .25
 Pumping rate ON gpm Total gallons pumped ----- Pressure ----- psi
 Stripper Blower ON/OFF ----- Temp ----- fpm ----- Battery -----
 Venting System ON/OFF ----- Temp ----- fpm ----- Battery -----
 Levels 1 ----- ? -----

	DTW	DTP	Product	"	DTW	DTP	Product
1	7.75	7.65	0.10	10	6.73		
2	6.71			19			
3	6.60			20			
4	5.59			21			
5	7.20			22			
6	7.50			23			
7	—			24			
8	7.67			25			
9	7.40			26			
10	6.85			27			
11	6.77			28			
12	7.40			29			
13	7.10			30			
14	7.70			AFTER BAILEING			
15	8.76			"	DTW	DTP	Product
16	8.70			RW.	7.75	7.65	.10.
17	7.75						
18	6.90						



HPC ENVIRONMENTAL SERVICES
P.O. BOX 610
Calverton, NY 11923
1-631-364-4900

cton_Lub Calibrator 201111 84-0011 Date 5-12-96 Time 1100
vage tank 10001 1.128 gal 2.041 Total gallons drawn 0.25 gal
ing rate QEF opm Total gallons pumped ----- Pressure ----- psi
glective total 116.001

WT	DTW	OTP	Product	"	DTW	OTP	Product
	7.6	7.35	.25	"	6.56		
	6.28			"			
	6.43			"			
	5.42			"			
	7.01			"			
	7.92			"			
				"			
	7.5			"			
	7.22			"			
	6.7			"			
	6.59			"			
	7.21				AFTER DIALING		
	6.92			"	DTW	OTP	Product
	7.51			P.W.	7.58	7.48	.10
	8.6						
	8.55						
	7.59						
	6.72						



MPC ENVIRONMENTAL SERVICES
P.O. BOX 610
Calverton, NY 11923
Tel: (516) 565-4900

: strongman (Collector) fuel calibration 011118 84:00 U Date 5:10:91 Time 1000--
drago tank level 1.127.75 gal 0 gal Total gallons 001000 Q---0-1
flow rate DN rpm Total gallons pumped 299876 Pressure -----psi
active total 1115.75 gal

#	DTW	DTP	Product	#	DTW	DTP	Product
11W	728	7.24	04	10	6.39		
	5.49			11			
2	6.18			12			
	3.79			13			
4	6.84			14			
	716			15			
6	-			16			
7	732			17			
8	702			18			
9	4.48			19			
10	5.25			20			
11	7.05			AFTER HAVING			
12	6.78			11	DTW	DTP	Product
13	7.32						
14	8.45						
15	8.40						
16	74.3						
17	6.56						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

section Fuel Calibration Spill# 84-0211 Date 4-26-92 Time 1100

gas tank level 127.75 gal Cumulative total 115.75 gal Total gallons bailed 0.10

pumping rate 0.0 gpm Total gallons pumped 799.852 Pressure _____ psi

stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

1 Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

ell#	DTW	DTP	Product	II	DTW	DTP	Product
1	6.60	6.50	.10				
2	4.64			17	6.00		
3	5.58			18	5.78		
4	4.52			19			
5	6.24			20			
6	6.58			21			
7	—			22			
8	6.90			23			
9	6.69			24			
10	6.87			25			
11	5.22			26			
12	6.43	Tropic		27			
13	6.05						AFTER BAILING
14	6.64			II	DTW	DTP	Product
15	7.86			R.W.	6.50		
16	7.77						
17	6.82						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11923
Tel: (516) 565-4900

cton Fuel Calibration 501111-84-0011 Date 5/22/96 Time 1400
AGO TANK 10061 1.128 gal 2.041 Total gallons 0.25 gal
AGO RATE 0.000 ppm Total gallons pumped _____ Pressure _____ psi
Electro total 1116.001

WT	DTW	OTP	Product	WT	DTW	OTP	Product
	7.6	7.35	.25	10	6.56		
	6.28			11			
	6.43			12			
	5.42			13			
	7.01			14			
	7.92			15			
	—			16			
	7.5			17			
	7.22			18			
	6.7			19			
	6.59			20			
	7.21						AFTER DIALING
	6.92			"	DTW	OTP	Product
	7.51			P.W.	7.58	7.48	.10
	8.6						
	8.55						
	2.59						
	6.72						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location GEMMAU (ANNU. FUEL CAR Spill# 84-001) Date 4/19/81 Time 0945

Storage tank level 127.65 gal Cumulative total 115.65 Total gallons bailed 0

Imping rate OFF gpm Total gallons pumped _____ Pressure _____ psi

Air Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

All Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

Pool Levels 1 _____ 2 _____

Well#	DTW	DTP	Product	II	DTW	DTP	Product
RW	7.37	7.33	0.04	10	6.50		
1	5.04			19			
2	6.26			20			
3	3.49			21			
4	6.92			22			
5	7.25			23			
6	—			24			
7	7.58			25			
8	7.29			26			
9	6.42			27			
10	6.52			28			
11	7.04			29			
12	6.84			30			
13	7.33			AFTER BAILING			
14	8.60			II	DTW	DTP	Product
15	8.57						
16	7.58						
17	6.62						



MPC ENVIRONMENTAL SERVICES

P.O. Box 610

Calverton, NY 11933

Tel: (516) 369-4900

Station Gurnee Lava Fuel Oil Spill #84-0011 Date 5-3-91 Time 1000Boat tank level 127.75 gal Cumulative total 115.25 Total gallons bailed QFlow rate OFF gpm Total gallons pumped _____ Pressure _____ psi

Scrapper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

1 Levels 1 ----- ? -----

#	DTW	DTP	Product	#	DTW	DTP	Product
	7.20	TRAVEL		10	6.27		
	4.90			19			
	6.15			20			
	5.11			21			
	6.75			22			
	7.05			23			
	-			24			
	7.22			25			
	6.95			26			
	6.30			27			
	6.30			28			
	6.45			29			
	6.65			30			
	6.48			AFTER BAILING			
	8.35			#	DTW	DTP	Product
	8.30						
	7.35						
	6.45						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

action taken Collected Fuel Calibrated Spill 111184-001L Date 7-5-91 Time 4:00
Storage tank level 1. 127.65 gal 2. _____ gal Total gallons bailed trace gal
Pumping rate 38 gpm Total gallons pumped 799.792 Pressure _____ psi
Cumulative total 1115.65 gal

Well#	DTW	DTP	Product	"	DTW	DTP	Product
1 RW	7.13	trace		"	6.26		
1	5.11			"			
2	5.99			"			
3	7.77			"			
4	6.70			"			
5	7.03			"			
6	-			"			
7	7.39			"			
8	7.11			"			
9	6.44			"			
10	6.30			"			
11	6.91	6.90	.01		AFTER BAILING		
12	6.65			"	DTW	DTP	Product
13	7.79			"	6.90		
14	8.42						
15	8.33						
16	7.35						
17	6.39						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location_GEMMAU (ANNUAL FUEL CAR Spill#_84-0011 Date_4/19/81 Time_0945

Storage tank level 127.65 gal Cumulative total 115.65 gal Total gallons bailed_0

Imping rate OFF gpm Total gallons pumped _____ Pressure _____ psi

Air Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

Sil Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

Pool Levels 1 ----- 2 -----

Well#	DTW	DTP	Product	II	DTW	DTP	Product
RW	7.37	7.33	0.04	10	6.50		
1	7.04			19			
2	6.26			20			
3	3.49			21			
4	6.92			22			
5	7.25			23			
6	—			24			
7	7.58			25			
8	7.29			26			
9	6.42			27			
10	6.52			28			
11	7.04			29			
12	6.84			30			
13	7.33			AFTER BAILING			
14	8.60			II	DTW	DTP	Product
15	8.57						
16	7.58						
17	6.62						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Grumman GruFucc Cor. Spill# S4-0011 Date 3/15/91 Time 1030

Storage tank level 127.64 gal Cumulative total 115.64 Total gallons bailed 0

Pumping rate 52 gpm Total gallons pumped 7904.39 Pressure psi

Air Stripper Blower ON/OFF Temp fpm Battery

Venting System ON/OFF Temp fpm Battery

Well Levels 1 2

Well #	DTW	DTP	Product	#	DTW	DTP	Product
	7.09			10	6.20		
1	3.95			19			
2	6.00			20			
3	2.86			21			
4	6.82			22			
5	6.99			23			
6	—			24			
7	7.30			25			
8	7.00			26			
9	4.60			27			
10	4.70			28			
11	6.82	TRACE		29			
12	6.59			30			
13	6.65			AFTER BAILING			
14	8.31			#	DTW	DTP	Product
15	8.29						
16	7.29						
17	6.35						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Action Collected Fuel Calibration Spill 84-001 Date 4-5-91 Time 1100
Storage tank level 1. 127.65 gal 2. 0 gal Total gallons bailed trace gal
Pumping rate 38 gpm Total gallons pumped 7997.92 Pressure psi
Cumulative total 115.65 gal

Well #	DTW	DTP	Product	"	DTW	DTP	Product
1 RW	7.13	Trace		"	10	6.26	
1	5.11			"	19		
2	5.99			"	20		
3	7.77			"	21		
4	6.70			"	22		
5	7.03			"	23		
6	-			"	24		
7	7.39			"	25		
8	7.11			"	26		
9	6.44			"	27		
10	6.30			"	28		
11	6.91	6.90	.01		AFTER BAILEING		
12	6.65			"	DTW	DTP	Product
13	7.29			"	6.90		
14	8.42						
15	8.33						
16	7.35						
17	6.39						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Grumman, Calverton

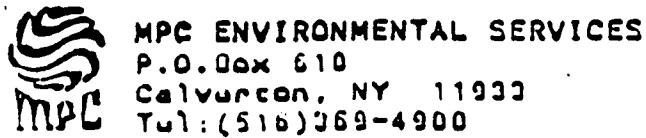
Location FUEL CALIBRATION AREA Spill # 84-0011 Date 2/2/91 Time 1200

Orange tank level 1. 127.64 gal 2. _____ gal Total gallons bailed 0 gal

Pumping rate ON gpm Total gallons pumped _____ Pressure _____ psi

Cumulative total 1115.64 gal

#	DTW	DTP	Product	#	DTW	DTP	Product
RW	7.68	trace		18	6.38		
1	4.90			19			
2	6.64			20			
3	5.65			21			
4	7.29			22			
5	7.60			23			
6	—			24			
7	7.81			25			
8	7.53			26			
9	6.68			27			
10	6.86			28			
11	7.50	trace		AFTER BAILING			
12	7.20			"	DTW	DTP	Product
13	7.29						
14	8.88						
15	8.83						
16	7.86						
17	7.01						



Action Fuel Calibration Spill # 84-0011 Date 3-22-91 Time 1900
 Range tank level 1. 127.64 gal 2. 0 gal Total gallons bailed 0 gal
 Pumping rate 63 rpm Total gallons pumped 7962.36 Pressure psi
 Relative total 1115.64 gal

ell#	DTW	DTP	Product	II	DTW	DTP	Product
1	6.94			10	6.04		
	4.17			19			
.	5.85			20			
-	2.94			21			
	6.5	Tone		22			
5	6.83			23			
:	—			24			
7	7.18			25			
1	6.9			26			
9	6.14			27			
10	6.06			28			
11	6.7	Tone					AFTER BAILING
12	6.45			II	DTW	DTP	Product
13	7.06						
14	8.2						
15	8.14						
16	7.15						
17	6.2						



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

R.K.

LOCATION: Calverton Fuel Pad/Industrial SPILL #40011 DATE 2/28/91 TIME 1430

STORAGE TANK LEVEL 1 12 1/2' IN FROZEN

2

CUMULATIVE TOTAL

GALLONS BAILED

T.G.P. 184929 OFC

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7'8 1/2"	7.71		22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5'0 1/2"	5.02		30			
2	6'9"	6.75		31			
3	3'6 1/2"	3.56		32			
4	7'3"	7.25		33			
5	7'6 3/4"	7.56		34			
6	—			35			
7	7'10 1/2"	7.88		36			
8	7'7 1/2"	7.60		37			
9	6'7 1/2"	6.62		38			
10	6'10 1/2"	6.88		39			
11	7'5 1/2"	7.46		40			
12	7'2 1/2"	7.21		41			
13	7'9 1/2"	7.79		42			
14	8'11"	8.92		43			
15	8'10 1/2"	8.85		44			
16	7'10 1/2"	7.88		45			
17	6'11 1/2"	6.90		46			
18	6'9 1/2"	6.81		47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

SP-11 # 84-0011

TION: Geumman Crv. Fuel Cac Area

DATE 3/8/91

TIME 0930

AGE TANK LEVEL 1. 127.64 GAL 2.

3. _____ 4. _____

LATIVE TOTAL 1115.64 GAL.

ING RATE RW1 47 GPM RW2 _____

RW3 _____ RW4 _____

ELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
W 1.	691			24.			
V 2.				25.			
W 2.				26.			
W 4.				27.			
	4.82			28.			
	5.80			29.			
	2.95			30.			
	6.42			31.			
	6.75			32.			
	-			33.			
	5.22			34.			
	5.55			35.			
	5.90			36.			
10.	6.00			37.			
	6.70 TRAIL			38.			
12.	6.40			39.			
	6.80			40.			
	8.12			41.			
	8.05			42.			
	7.07			43.			
	6.15			44.			
	6.00			45.			
				46.			
				47.			
				48.			
				49.			
				50.			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4800

LOCATION: Geumman Cray Fuel Cr. River SPILLS 24-0011 DATE 2/8/91 TIME 1230

STORAGE TANK LEVEL 1 127.64 GAL.

CUMULATIVE TOTAL 1115.64 GAL.

GALLONS BAILED 0

116 Gpm TGP 776241

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.60	7.59	0.01	22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.39			30			
2	6.57			31			
3	5.55			32			
4	7.15			33			
5	7.45			34			
6	—			35			
7	7.66			36			
8	7.39			37			
9	6.45			38			
	6.72			39			
11	7.35 TRAIL			40			
12	7.05			41			
13	7.67			42			
14	8.72			43			
15	8.69			44			
16	7.72			45			
17	6.85			46			
18	6.70			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

cation Calverton Fuel Cul. Spill# 84-0011 Date 2-28-91 Time 1430
Drage tank level 1. 127.64 gal 2. _____ gal Total gallons bailed 0 gal
umping rate ON gpm Total gallons pumped 784929 Pressure _____ psi
mulative total 1115.64 gal

Well#	DTW	DTP	Product	#	DTW	DTP	Product
2W	7.71			18	6.81		
1	5.02			19			
2	6.75			20			
3	3.56			21			
4	7.25			22			
5	7.56			23			
6	—			24			
7	7.88			25			
8	7.60			26			
9	6.62			27			
10	6.88			28			
11	7.46			AFTER BAILING			
12	7.21			11	DTW	DTP	Product
13	7.79						
14	8.92						
15	8.85						
16	7.88						
17	6.96						



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CALVERTON FUEL CALIBRATION SPILL 84.0011 DATE 12/24/91 TIME 12:00
STORAGE TANK LEVEL 1 127.62 GAL 2. _____
CUMULATIVE TOTAL 1115.62 GAL. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.13			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.62			30			
2	6.10			31			
3	5.10			32			
4	6.71			33			
5	7.00			34			
6	—			35			
7	7.25			36			
8	6.96			37			
9	6.33			38			
10	6.37			39			
11	6.92	Trace		40			
12	6.62			41			
13	7.25			42			
14	8.29			43			
15	8.25			44			
16	7.27			45			
17	6.92			46			
18	6.25			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Calverton Fuel Cst. SPILL # 84-0011 DATE 2/14/91 TIME 1200
STORAGE TANK LEVEL: 127.64 GAL. 2 _____
CUMULATIVE TOTAL 115.64 GAL. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.33			30			
2	6.58			31			
3	9.00			32			
4	7.15			33			
5	7.46			34			
6	—			35			
7	7.64			36			
8	7.37			37			
9	7.04			38			
10	5.40			39			
11	7.33			40			
12	7.08			41			
13	7.75			42			
14	8.77			43			
15	8.73			44			
16	7.73			45			
17	6.85			46			
18	6.71			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Catal. Fuel Calibration SPILL# 89-0011 DATE 19, 91 TIME 1300
STORAGE TANK LEVEL 1 127.62 G. 2 _____
CUMULATIVE TOTAL 1115.62 G. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.73			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	5.83			30			
2	6.71			31			
3	5.71			32			
4	7.37			33			
5	7.58			34			
6	—			35			
7	7.75			36			
8	7.50			37			
9	5.37			38			
10	6.15			39			
11	7.50	TRACE		40			
12	7.21			41			
13	7.83			42			
14	8.85			43			
15	8.79			44			
16	7.83			45			
17	7.00			46			
18	6.85			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: (Grumman) Calverton Fuel Calibration SPILLS 84-0011 DATE 1-31-91 TIME 1030
STORAGE TANK LEVEL 1 127.64 GAL 2.
CUMULATIVE TOTAL 1115.64 GAL GALLONS BAILED 0.02 GAL

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.36	7.34	.02	22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29			
1.	4.93			30			
2	6.36			31			
3	4.89			32			
4	6.93			33			
5	7.23			34			
6	-			35			
7	7.46			36			
8	7.19			37			
9	5.97						AFTER BAILING
10	6.49						
11	7.17	7.14	.02		7.19		
12	6.86						
13	7.42						
14	8.53						
15	8.46						
16	7.51						
17	6.67						
18	6.49						
19							
20							
21							
				50			

MARINE POLLUTION CONTROL, INC.

P.O. BOX 2220

EAST PATCHOGUE, N.Y. 11772

March 26, 1984

Grumman - Calverton
Plan 1" = 30'

MWN-1

	0'-1'	Light brown - med./finc sand
S-1	1'-2'	Dark brown - med./finc sand, slight odor
S-2	2'-3'	Gray brown - med./finc sand, strong odor/moist
S-3	3'-5'	Gray brown - finc sand, strong odor/moist
S-4	5'-6'	Light gray brown - fine sand, strong odor/moist
S-5	6'-10'	Dark gray brown - fine sand, strong odor/moist
S-6	10'-15'	Light gray - wet fine sand/silt, odor (DTW = 3')

DTW = 4.22' from T.O.C.

MWN-2

S-1	0'-1'	Gray brown - med. sand, strong odor/dry
S-2	1'-6'	Dark gray brown - med./fine sand, heavy odor
S-3	6'-10'	Light gray brown - med./fine silty sand, odor (DTW = 3-4')

DTW = 3.86' from T.O.C.

MWN-3

S-1	0'-4'	Dark gray brown - med. sand, odor @ 1' (moist @ 2')
S-2	4'-8'	Light gray - med./silty sand, odor - moister material
S-3	8'-10'	Light gray - med./silty sand, strong odor - very moist (DTW = 3')

DTW = 2.92' from T.O.C.

MWN-4

S-1	0'-3'	Brown sand loam (5% gravel), slight odor @ 1', dry fill
S-2	3'-7'	Lighter brown - med. sand (5% gravel) - less odor, dry
S-3	7'-10'	Light white/brown - med. sand, no odor - moist

DTW = 4.44' from T.O.C.



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Gemmen Gow. Fuel Oil Area SPILL 84-0011 DATE 1/16/91 TIME 1100
STORAGE TANK LEVEL 1 127.62 GAL. 2 _____
CUMULATIVE TOTAL 1115.62 GAL GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.13			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	3.90			30			
2	6.10			31			
3	5.05			32			
4	6.70			33			
5	7.00			34			
6	—			35			
7	7.24			36			
8	6.97			37			
9	6.20			38			
10	6.26			39			
11	6.93	6.92	0.01	40			
12	6.67			41			
13	6.90			42			
14	8.30			43			
15	8.25			44			
16	7.27			45			
17	6.45			46			
18	6.25			47			
19				48			
20				49			
21				50			

SAMPLE/CORE LOG

Boring/Well 1415 Project/No. Crammon - Calverton Page 1 of 2

Site Location Fuel Calibration Drilling Started 11-20-87 Drilling Completed

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sampler
Coring Device Return from Area

Length and Diameter
of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger - Boom Tack

Drilling Contractor MPC Driller Tim Mayel Helper Kevin Jackson

Prepared
By John Goff Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface)		Core Recovery	Time/Hydraulic Pressure or Flows per 6 inches
From	To	(feet)	

Sample/Core Description

0	5'	-	-	Fine sand, light brown
3	9'	-	-	Fine, gray sand
9'	13'	-	-	Fine to silty gray sand
13'	15	-	-	gray turning to gray-brown soft

0' 5'		Fine, light brown sand
5' 9'		Fine gray sand, faint odor (retro)
9' 13'		Fine to silty gray sand
15' 15'		gray turning to brown silt
Total Pipe 17' 6"		



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Hul Palobration Area SPILLS 84-0011 DATE 1-2-91 TIME 1100
STORAGE TANK LEVEL 1. 127.62 G. 2.
CUMULATIVE TOTAL 1115.62 G. GALLONS BAILED 0.12

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.5			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.48			30			
2	6.49			31			
3	5.5			32			
4	7.07	Trace		33			
5	7.38			34			
6	—			35			
7	7.58			36			
8	7.31			37			
9	6.68			38	AFTER BAILED		
10	6.64			39			
11	7.42	7.26	16	40	7.28	Trace	
12	7.			41			
13	7.41			42			
14	8.68			43			
15	8.6			44			
16	7.64			45			
17	6.81			46			
18	6.62			47			
19				48			
20				49			
21				50			

MWN-5

S-1 0'-4' Yellow brown - med./fine sand loam, no odor - dry
S-2 4'-6' Lighter yellow/tan - med. sand, no odor
S-3 6'-10' White/tan - med. sand, no silt/no odor - very moist

DTW = 4.71' from T.O.C.

MWN-6

S-1 0'-3' Brown - med. sandy loam with aggregates, dry - no odor
S-2 3'-6' Lighter brown - med. sand, no aggregates, dry - no odor
S-3 6'-10' White/tan - med. sand, no silts, moist - no odor

DTW = 4.84' from T.O.C.

MWN-7

S-1 0'-4' Brown - med. sand with aggregates, dry - no odor
S-2 4'-6' Light brown sand - med./fine, dry - no odor
S-3 6'-10' Yellow/brown - med. sand, some silt, moist - no odor

DTW = 4.98' from T.O.C.

MWN-8

S-1 0'-3' Light brown - med./fine sand, some silt, dry - no odor
S-2 3'-6' Gray brown - med. sand, moist - no odor
S-3 6'-10' Dark gray brown - med. sand, moister - slight odor
(10-10 flush oil
possibly)

DTW = 4.87 from T.O.C.



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Grimman Law Firm TPAW Spill # 82-0923 Date 5-3-91 Time 1100
Storage tank level 59.05 gal Cumulative total 1220.09 Total gallons bailed 05
umping rate 28 gpm Total gallons pumped 698604 Pressure _____ psi
1. Scrubber Blower ON/OFF _____ Temp _____ fpm _____ Battery _____
2. Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____
ool Levels 1 _____ ? _____

Spill #	DTW	DTP	Product	#	DTW	DTP	Product
RW				10	1140		
1	13.18	13.10	0-08	19			
2	10.11			20			
3	12.00			21			
	14.37			22			
5	13.10			23			
6	11.90			24			
7	10.70	TRACE		25			
8	13.45	TRACE		26			
9	16.65			27			
10	13.46			28			
11	18.85			29			
12	14.30			30			
13	14.90				AFTER BAILING		
14	14.95				DTW	DTP	Product
15	14.42			1	13.11	TRACE	
16	16.25						
17	10.65						

SAMPLE/CORE LOG

Boring/Well 16, 17, 18 Project/No. Grumman - Calverton Page 2 of 2

Site Location Fuel Calibration Drilling Started 11/20/81 Drilling Completed —

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device Return from Auger

Length and Diameter
of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger - Room Tick

Drilling Contractor _____ Driller J. Mayer Helper K. Jackson

Prepared By John Goff Hammer Weight _____ Hammer Drop _____ inches

Boring	Sample/Core Depth (feet below land surface)	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	
				From	To
16	0' 5'				Fine brown sand
	5' 9'				Fine to silty & light tan sand
	9' 11'				Tan turning to gray silt faint <u>unknown</u> color
	11' 13'				gray silt
	13' 15'				gray turning to brown silt
					Total Pipe 17'
					stick up 2'
					Total Drilled 15'
17	0' 15'				Fine to silty sand; H brown turning to light tan <u>No Odor</u>
					Total Pipe 16'
					stick up 1'
					Total Drilled 15'
18	0' 8'				Fine tan sand
	8' 9'				Gray fine sand to 0' 6"
	9' 15'				light tan sand to 0' 6" stick up 1' 6"
					Total Drilled 15'



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Gerrard Lane Fuel Tank Area Spill # 82-0923 Date 4/19/91 Time 084

Storage tank level 58.88 gal Cumulative total 29.92 Total gallons bailed 10

Pumping rate 31 gpm Total gallons pumped 651.650 Pressure psi

Air Stripper Blower ON/OFF Temp fpm Battery

Soil Venting System ON/OFF Temp fpm Battery

Pool Levels 1 2

Well#	DTW	DTP	Product	II	DTW	DTP	Product
RW				10	11.71		
1	13.55	13.43	0.12	19			
2	12.46			20			
3	12.33			21			
4	14.57			22			
5	13.42			23			
6	13.21			24			
7	13.07	TRACE		25			
8	13.80			26			
9	16.95			27			
10	13.78			28			
11	19.19			29			
12	14.62			30			
13	15.23			AFTER BAILING			
14	15.29			II	DTW	DTP	Product
15	14.75			1	13.46	13.45	0.01
16	16.58						
17	13.00						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 569-4900

action number Collect 51 Calvert Spill # 84-0011 Date 7-5-91 Time 4:00
Storage tank level 1. 127.65 gal 2. 0 gal Total gallons bailed trace gal
Pumping rate 38 gpm Total gallons pumped 799792 Pressure psi
Cumulative total 115.65 gal

Well#	DTW	DTP	Product	"	DTW	DTP	Product
1 RW	7.13	TRACE		"	6.26		
1	5.11			"			
2	5.99			"			
3	7.77			"			
4	6.70			"			
5	7.03			"			
6	-			"			
7	7.39			"			
8	7.11			"			
9	6.44			"			
10	6.30			"			
11	6.91	6.90	.01		AFTER BAILEING		
12	6.65			"	DTW	DTP	Product
13	7.29			"	6.90		
14	8.42						
15	8.33						
16	7.35						
17	6.39						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11923
Tel: (516) 369-4900

Location Groundwater Collection Facility Date 4-5-91 Time 0900
Storage tank level 1.58.67 gal 2. _____ gal Total gallons bailed 0.50 gal
Pumping rate 37 gpm Total gallons pumped 599617 Pressure _____ psi
Cumulative total 219.72 gal

Well	DTW	DTP	Product	II	DTW	DTP	Product
RW	13.64	13.44	.20	10	11.61		
1	13.44	13.32	.12	19			
2	12.33			20			
3	12.20			21			
4	14.42			22			
5	13.31			23			
6	12.11			24			
7	12.98	12.97	.05	25			
8	13.68	13.67	.01	26			
9	16.84			27			
10	13.67			28			
11	19.06						AFTER BAILING
12	14.49			II	DTW	DTP	Product
13	15.11			KW	13.53		
14	15.16			1	13.35		
15	14.63			7	12.97		
16	16.50			8	13.70		
17	12.86						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Action Fuel Calibration Spill #4-0011 Date 3-22-91 Time 1900
rage tank level 1. 127.64 gal 2. _____ gal Total gallons bailed 0 gal
imping rate 63 ppm Total gallons pumped 7962.36 Pressure _____ psi
ulative total 115.64 gal

#	DTW	DTP	Product	#	DTW	DTP	Product
1	6.94			10	6.04		
2	4.17			19			
3	5.85			20			
4	9.94			21			
5	6.5	Trace		22			
6	6.83			23			
7	—			24			
8	7.18			25			
9	6.9			26			
10	6.14			27			
11	6.06			28			
12	6.7	Trace		AFTER BAILING			
13	6.45			11	DTW	DTP	Product
14	7.06						
15	8.2						
16	8.14						
17	7.15						
18	6.2						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Leitaining Spill # 82-0929 Date 2-22-96 Time 1902
Storage tank level 9.58 gal 05 gal Total gallons bailed 0.40 gal
Pumping rate 30 gpm Total gallons pumped 1270.36 Pressure psi
Cumulative total 219.10 gal

Well#	DTW	DTP	Product	"	DTW	DTP	Product
RW				10	11.58		
1	13.42	12.3	.12	19			
2	12.33			20			
3	12.2			21			
4	14.49			22			
5	13.29			23			
6	12.08			24			
7	13.05	12.91	.14	25			
8	13.67	Trace		26			
9	16.83			27			
10	13.66	Trace		28			
11	19.1						AFTER BAILING
12	14.5			"	DTW	DTP	Product
13	15.13			1.	13.42	Trace	
14	15.16			7.	13.06	Trace	
15	14.63						
16	16.45						
17	12.85						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

SP# 84-0011

TION: Geummer Crw. Fuel Cntr Area

DATE 3/8/91

TIME 0930

AGE TANK LEVEL 1. 127.64 GAL 2.

3. 4.

LATIVE TOTAL 1115.64 GAL.

ING RATE RW1 47 GPM : RW2

RW3 RW4

ELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
W 1.	691			24.			
V 2.				25.			
V 3.				26.			
V 4.				27.			
	4.82			28.			
	5.80			29.			
	295			30.			
	6.42			31.			
	6.75			32.			
	-			33.			
	5.22			34.			
	5.55			35.			
	5.90			36.			
10.	6.00			37.			
	6.70	TRAIL		38.			
12.	6.40			39.			
	6.80			40.			
	8.12			41.			
	8.05			42.			
	7.07			43.			
	6.15			44.			
	6.00			45.			
				46.			
				47.			
				48.			
				49.			
				50.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Geummen [Alv. Fire Team Area] Spill # 82-0923 Date 3/8/91 Time 0841

Storage tank level 17.55 gal Cumulative total 218.60 Total gallons bailed 20

Pumping rate 33 gpm Total gallons pumped 466256 Pressure psi

Air Stripper Blower ON/OFF ----- Temp ----- fpm ----- Battery -----

Soil Venting System ON/OFF ----- Temp ----- fpm ----- Battery -----

Pool Levels 1 ----- 2 -----

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				10	11.60		
1	13.50	13.32	0.18	19			
2	12.35	TRACE		20			
3	12.30			21			
4	14.55			22			
5	13.35			23			
6	12.12			24			
7	13.05	12.95	0.10	25			
8	13.75			26			
9	16.85			27			
10	13.73			28			
11	19.19			29			
12	14.60			30			
13	15.22						AFTER BAILING
14	15.25			#	DTW	DTP	Product
15	14.70			1	13.40	13.36	0.04
16	16.47			7	10.98	12.96	0.02
17	12.90						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

cation Calverton Fuel Cul. Spill# 84-0011 Date 2-28-91 Time 1430
rage tank level 1. 127.64 gal 2. _____ gal Total gallons bailed 0 gal
mping rate ON gpm Total gallons pumped 784929 Pressure _____ psi
mulative total 1115.64 gal

Well#	DTW	DTP	Product	#	DTW	DTP	Product
2W	7.71			10	6.81		
1	5.02			19			
2	6.75			20			
3	3.56			21			
4	7.25			22			
5	7.56			23			
6	—			24			
7	7.88			25			
8	7.60			26			
9	6.62			27			
10	6.88			28			
11	7.46						AFTER BAILING
12	7.21			11	DTW	DTP	Product
13	7.79						
14	8.92						
15	8.85						
16	7.88						
17	6.96						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Grumman Air Free Team Spill # 82-0923 Date 3/15/91 Time 0930
Storage tank level 17.65 gal Cumulative total 218.70 Total gallons bailed 10
Pumping rate 31 gpm Total gallons pumped 497188 Pressure _____ psi
Air Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____
Oil Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____
Pool Levels 1 _____ 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				18	11.66		
1	13.51	13.40	0.11	19			
2	12.43			20			
3	12.30			21			
4	14.55			22			
5	13.40			23			
6	12.17			24			
7	13.05	12.97	0.08	25			
8	13.75			26			
9	16.90			27			
10	13.75			28			
11	19.19			29			
12	14.60			30			
13	15.20						AFTER BAILING
14	15.27			11	DTW	DTP	Product
15	14.71			1	13.43	13.41	0.02
16	16.55			7	13.00	TRACE	
17	12.95						



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahueton Fuel Co. SPILL # 84-0011 DATE 3/14/91 TIME 1200
STORAGE TANK LEVEL 127.64 GAL. 2
CUMULATIVE TOTAL 115.64 GAL. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.33			30			
2	6.58			31			
3	9.00			32			
4	7.15			33			
5	7.46			34			
6	—			35			
7	7.64			36			
8	7.37			37			
9	7.04			38			
10	5.40			39			
11	7.33			40			
12	7.08			41			
13	7.75			42			
14	8.77			43			
15	8.73			44			
16	77.3			45			
17	6.85			46			
18	6.71			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Calverton Fire training Spill # 82-0923 Date 2-28-91 Time 1100
Storage tank level 1. 57.35 gal 2. _____ gal Total gallons bailed 0.25 gal
Pumping rate 32 gpm Total gallons pumped 431050 Pressure _____ psi
Cumulative total 218.40 gal

Well #	DTW	DTP	Product #	DTW	DTP	Product
RW				18		
1	13.83	13.71	.13	19		
2	12.73			20		
3	12.60			21		
4	14.83			22		
5	13.71			23		
6	13.50			24		
7	17.35	trace		25		
8	14.08			26		
9	17.29	17.21	.08	27		
10	14.06			28		
11	19.48			AFTER BAILING		
12	14.92			11	DTW	DTP
13	15.52			1	13.73	
14	15.54			9	17.23	
15	15.02					
16	16.85					
17	13.25					



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 634-4900

LOCATION: Grumman Collective Fuel Calibration SPILLS 84-0011 DATE 1-31-91 TIME 1030
STORAGE TANK LEVEL 1 127.64 GAL 2 _____
CUMULATIVE TOTAL 1115.64 GAL GALLONS BAILED 0.02 GAL

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.36	7.34	.02	22			
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	-			26			
PW 2	-			27			
IW	-			28			
	-			29			
1.	4.93			30			
2	6.36			31			
3	4.89			32			
4	6.93			33			
5	7.23			34			
6	-			35			
7	7.46			36			
8	7.19			37			
9	5.97						AFTER BAILING
10	6.49						
11	7.17	7.14	.02		7.19		
12	6.86				41		
13	7.42				42		
14	8.53				43		
15	8.46				44		
16	7.51				45		
17	6.67				46		
18	6.49				47		
19					48		
20					49		
21					50		



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Garrison Collected Fire Training

SPILL # 82-1923

DATE 1-31-91

TIME 0900

STORAGE TANK LEVEL 56.85 GAL.

2.

CUMULATIVE TOTAL 217.90 GAL.

GALLONS BAILED

0.25 GAL

WELL #	DTW	OTP	PRODUCT	#	DTW	OTP	PRODUCT
RW 1.	13.65	13.52	.13	22	13.00		
RW 2.	-			23			
RW 3.	-			24			
RW 4.	-			25			
PW 1	10.52			26			
PW 2	-						
IW	-						
	-						
							AFTER BAILED
1.	13.46	13.38	.08	1	13.44		
2	13.40			31			
3	12.38			32			
4	14.54			33			
5	13.39			34			
6	12.15			35			
7	13.07	13.01	.06	7	13.10		
8	13.74	13.73	.01	8	13.76		
9	16.89			9			
10	13.74	13.73	.01	10	13.76		
11	19.23			40			
12	14.59			41			
13	15.24			42			
14	15.26			43			
15	14.71			44			
16	16.53			45			
17	12.91			46			
18	11.65			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Germann Corp. Fuel Oil Area SPILL # 84-0011 DATE 1/16/91 TIME 1100
STORAGE TANK LEVEL 1. 127.62 GAL. 2. _____
CUMULATIVE TOTAL 1115.62 GAL GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.13			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	3.90			30			
2	6.10			31			
3	5.05			32			
4	6.70			33			
5	7.00			34			
6	—			35			
7	7.24			36			
8	6.97			37			
9	6.20			38			
10	6.26			39			
11	6.93	6.92	0.01	40			
12	6.62			41			
13	6.90			42			
14	8.30			43			
15	8.25			44			
16	7.27			45			
17	6.45			46			
18	6.25			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Geumman Cal Fire Terin SPILL # 82-0923 DATE 1/16/91 TIME 09

STORAGE TANK LEVEL 1 56.35 GAL

2

CUMULATIVE TOTAL 217.40 GAL

GALLONS BAILED .20

SYSTEM IS OFF

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	13.65	TRACE		30			
2	12.65	TRACE		31			
3	12.61			32			
4	14.90			33			
5	13.70						AFTER BAILED
6	12.45						
7	13.50	13.27	0.23	7	13.34	13.31	0.03
8	14.05	TRACE		37			
9	17.15			38			
10	14.05			39			
11	19.65			40			
12	14.95			41			
13	15.62			42			
14	15.60			43			
15	15.05			44			
16	16.78			45			
17	13.20			46			
18	11.90			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fuel Reservation Area SPILL# 84-0011 DATE 1-2-91 TIME 1100
STORAGE TANK LEVEL 1. 127.62 G. 2.
CUMULATIVE TOTAL 1115.62 G. GALLONS BAILED 0.12

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	7.5			22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
				29			
1	4.48			30			
2	6.49			31			
3	5.5			32			
4	7.07	Trace		33			
5	7.38			34			
6	—			35			
7	7.58			36			
8	7.31			37			
9	6.68			38	AFTER BAILED		
10	6.64			39			
11	7.42	7.26	16	41	7.28	Trace	
12	7.			41			
13	7.41			42			
14	8.68			43			
15	8.6			44			
16	7.64			45			
17	6.81			46			
18	6.62			47			
19				48			
20				49			
21				50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: CAFU FIRE TRAINING SPILLS 83-0923 DATE 1/9/91 TIME 0900

STORAGE TANK LEVEL 1 56.15 GAL.

CUMULATIVE TOTAL 217.20 GAL.

GALLONS BAILED 0.25 G.

system is OFF

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22			
RW 2.				23			
RW 3.				24			
RW 4.				25			
PW 1				26			
PW 2				27			
IW				28			
							AFTER BAILEY
1	14.00	13.92	.08	1	13.96		
2	13.02	12.98	.04	2	13.00		
3	12.88			32			
4	15.17			33			
5	14.00			34			
6	12.75			35			
7	13.77	13.56	.21	7	13.64		
8	14.33			37			
9	17.46			38			
10	14.29			39			
11	19.88			40			
12	15.25			41			
13	15.90			42			
14	15.83			43			
15	15.29			44			
16	17.08			45			
17	13.98			46			
18	12.31			47			
19				48			
20				49			
21				50			

MWN-5

S-1 0'-4' Yellow brown - med./fine sand loam, no odor - dry
S-2 4'-6' Lighter yellow/tan - med. sand, no odor
S-3 6'-10' White/tan - med. sand, no silt/no odor - very moist

DTW = 4.71' from T.O.C.

MWN-6

S-1 0'-3' Brown - med. sandy loam with aggregates, dry - no odor
S-2 3'-6' Lighter brown - med. sand, no aggregates, dry - no odor
S-3 6'-10' White/tan - med. sand, no silts, moist - no odor

DTW = 4.84' from T.O.C.

MWN-7

S-1 0'-4' Brown - med. sand with aggregates, dry - no odor
S-2 4'-6' Light brown sand - med./fine, dry - no odor
S-3 6'-10' Yellow/brown - med. sand, some silt, moist - no odor

DTW = 4.98' from T.O.C.

MWN-8

S-1 0'-3' Light brown - med./fine sand, some silt, dry - no odor
S-2 3'-6' Gray brown - med. sand, moist - no odor
S-3 6'-10' Dark gray brown - med. sand, moister - slight odor
(10-10 flush oil possibly)

DTW = 4.87 from T.O.C.



Grumman - Calverton

Fuel Depot

Spill #82 - 1680

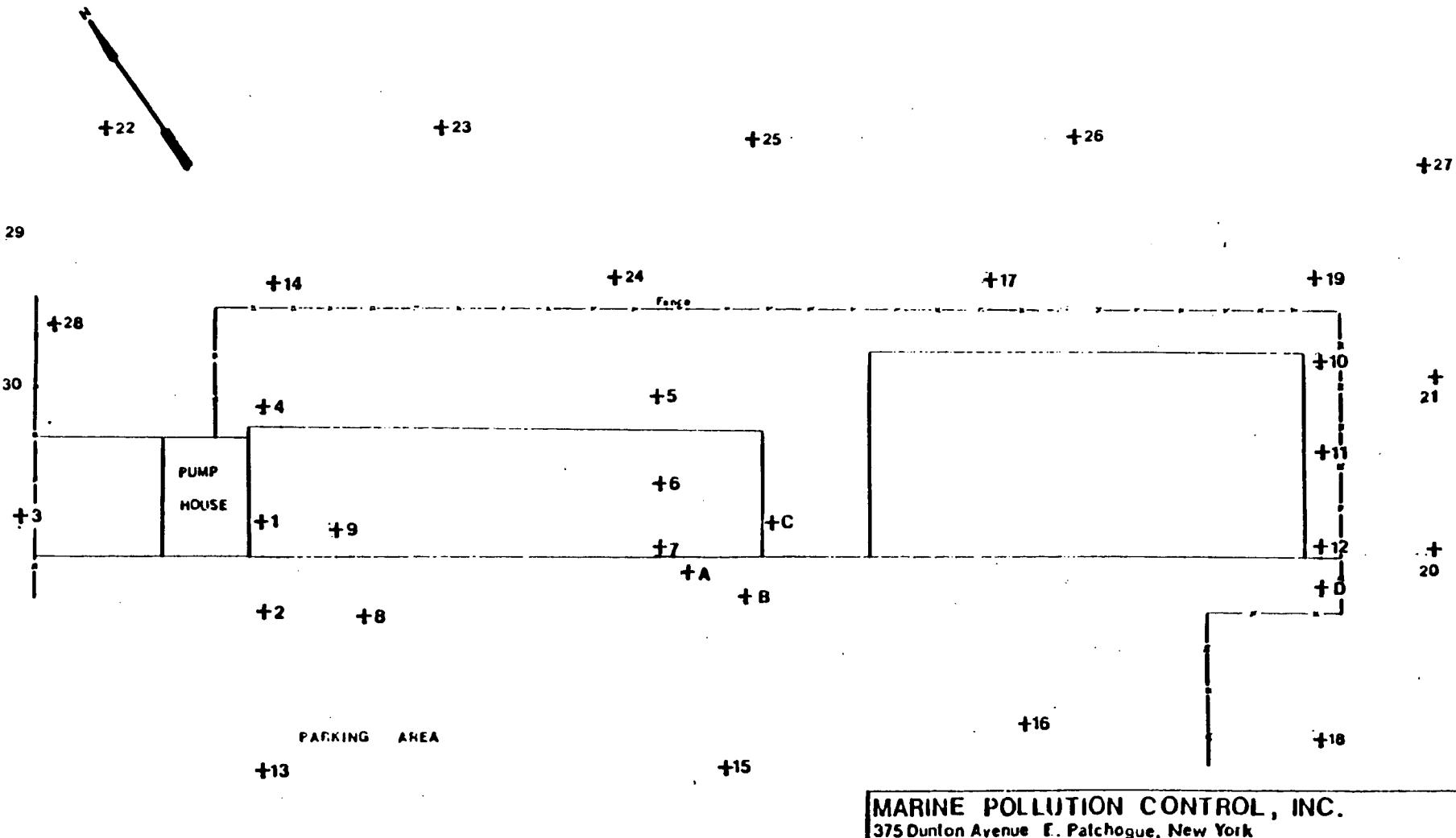
Prepared by:

MPC Environmental Services
October 11, 1991

P.O. Box 610
460 Edwards Avenue, Calverton, NY 11933
516-369-4900 FAX 516-369-4909

632

Wells	Top of pipe elevation
1	102.55
2	101.31
3	101.22
4	103.54
5	103.07
6	102.22
7	102.16
8	101.55
9	103.15
10	103.81
11	103.07
12	104.37
A	101.37
B	101.45
C	102.48
D	103.05
13	100.77
14	101.67
15	100.88
16	101.19
17	101.04
18	101.24
19	99.86
20	100.98
21	99.44
22	100.37
3	101.08
24	100.26
25	100.74
26	100.50
27	97.57
28	100.84



MARINE POLLUTION CONTROL, INC.
375 Dunton Avenue E. Patchogue, New York

SCALE: 1" = 30'

REVISED. 6/26, 1989

Scale Fit

WELL LOCATIONS

Serial: B2-1680

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910476/1

02/14/91

Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keehey

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton, Fuel Depot

COLLECTED BY: MPC

DATE COL'D: 02/07/91 RECEIVED: 02/08/91

SAMPLE: Water Sample, MW#30, 1400

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	<1
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	<1
Petrol. Hydrocarbons	mg/L	0.4

ANALYTICAL PARAMETERS

-

cc: Ohlmann, Selva & G. Vassilev-MPC

REMARKS:

DIRECTOR

634

ECOTEST LABORATORIES, INC.**ENVIRONMENTAL TESTING**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C910476/2

02/14/91

Grumman Aerospace Corporation
Mail Station A03-116
Bethpage, NY 11714

ATTN: Harvey Keahay

PO# 30-28955

SOURCE OF SAMPLE: Grumman, Calverton, Fuel Depot
COLLECTED BY: MPC DATE COL'D: 02/07/91 RECEIVED: 02/08/91

SAMPLE: Water Sample, MW#29, 1429

ANALYTICAL PARAMETERS

Benzene	ug/L	<1
Toluene	ug/L	20
Ethyl Benzene	ug/L	<1
m + p Xylene	ug/L	<2
o Xylene	ug/L	9
Petrol. Hydrocarbons	mg/L	1.6

ANALYTICAL PARAMETERS

cc: Ohlmann, Selva & G. Vassilev-MPC

REMARKS:

DIRECTOR

635

NYSDOH ID# 10320

rn#

1947



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 10/3/91 Time 1100

Location: Geumann Calv. Fuel Depot Area

Spill # 83-1680

Storage tank level _____ gallons

Recovered to date 110.55 gal.

Pump rate : _____ gpm

Tot. gal. pumped _____

Tot. gal. bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

RW				21	15.41		
1	16.77	TRACE		22	14.66		
2	15.55			23	15.45		
3	15.40			24	14.61		
4	17.80			25	15.15		
5	17.40			26	15.00		
6	16.58			27	12.17		
7	16.57			28	15.05		
8	DRY			29	14.75		
9	17.40			30	14.92		
10	18.37			31	A 15.71		
11	17.60			32	B 15.80		
12	18.90			33	C 16.84 S. TRACE		
13	15.00			34	D 17.63		
14	15.95			35			
15	15.22			36			
16	15.60			37			
17	15.47			38			
18	15.65			39			
19	14.40			40			
20	14.02			41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-27-91 Time 1100

Location: Fuel Depot

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date _____ gal

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW				21			
1	16.6	Trace		22	13.92		
2	15.34			23	14.5		
3	15.22			24	15.24		
4	17.61			25	14.46		
5	17.86			26	14.98		
6	16.45			27	14.89		
7	16.45			28	12.06		
8	DRY			29	14.88		
9	17.27			30	14.55		
10	18.26			A	14.72		
11	17.51			B	15.57		
12	18.81			C	15.68		
13	14.81			D	16.7		
14	15.76				17.5		
15	15.1			35			
16	15.5			36			
17	15.93			37			
18	15.56			38			
19	14.3			39			
20	15.34			40			
				41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9/20/81 Time 1130

Location: Grumman G&W Fuel Depot Area

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date _____ gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

RW				18	15.60		
1	16.70	TRACE		19	14.35		
2	15.47			20	13.97		
3	15.35			21	15.35		
4	17.75			22	14.59		
5	17.35			23	15.35		
6	16.52			24	14.55		
7	16.51			25	15.02		
8	DRY			26	14.95		
9	17.35			27	12.10		
10	18.30			28	15.00		
11	17.55			29	14.71		
12	18.85			30	14.85		
13	WOODS			A	15.65		
14	15.88			B	15.75		
15	15.17			C	16.76 TRACE		
16	15.55			D	17.55		
17	15.45						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-13-91 Time 1030

Location: Fuel Depot Spill #: 82-1680

Storage tank level _____ gallons Recovered to date _____ gal.

Pump rate: _____ gpm Tot. gal. pumped _____ Tot. gal. bailed _____

Well # UTW UTP Product II UTW UTP Product

KW				21		19.8		
1	16.56			22		14.43		
2	15.39			23		15.18		
3	15.2			24		14.42		
4	17.6			25		14.94		
5	17.2			26		14.79		
6	16.36			27		11.94		
7	16.36			28		14.84		
8	DRY			29		14.57		
9	17.2			30		14.71		
10	18.15			A		15.51		
11	12.4			B		15.61		
12	18.71			C		16.64		
13	14.77			D		17.98		
14	15.71			35				
15	15.01			36				
16	15.4			37				
17	15.27			38				
18	15.43			39				
19	14.18			40				
20	15.2			41				



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 9-6-91 Time 145

Location: Geummer CWL Fuel Depot Area

Spill # _____

Storage tank level _____ gallons

Recovered to date _____ gal

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
1	16.40	TRACE		21	15.07		
2	15.20			22	14.29		
3	15.05			23	15.05		
4	17.45			24	14.25		
5	17.05			25	14.80		
6	16.21			26	14.65		
7	16.20			27	11.83		
8	DRY			28	14.68		
9	17.05			29	14.40		
10	18.01			30	15.05		
11	17.25			• A	15.35		
12	18.60	TRACE		• B	15.45		
13	14.62			• C	16.50		
14	15.57			• D	17.25		
15	14.85			35			
16	15.27			36			
17	15.13			37			
18	15.31			38			
19	14.05			39			
20	13.07			40			
				41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 309-4900

Date 8-30-91 Time 0930

Location: Fuel Depot

Spill #: 82-1680

Storage tank level _____ gallons

Recovered to date _____ gal.

Pump rate: _____ gpm

Tot. gal. pumped _____

Tot. gal. bailed _____

Well #	UTW	DTP	Product	#	UTW	DTP	Product
1	16.28			21	13.50		
2	15.02			22	14.19		
3	14.92			23	14.92		
4	17.30			24	14.13		
5	16.92			25	14.65		
6	16.08			26	14.50		
7	16.08			27	11.67		
8	DRY			28	14.57		
9	16.92			29	14.30		
10	17.84			30	14.43		
11	17.08			A	15.21		
12	18.39			B	15.29		
13	Flooded			C	16.33		
14	15.44			D	17.06		
15	14.71			35			
16	15.09			36			
17	14.97			37			
18	15.14			38			
19	14.89			39			
20	14.90			40			
				41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-22-91 Time 1000

Location: Grumman GLO. Fuel Cncl. Area

Spill # 84-0015

Storage tank level 180.67 gallons

Recovered to date 1168.67 gal.

Pump rate : 0 gpm Tot. gal. pumped _____ Tot. gal. bailed 1.5 Gal

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

RW	7.10	7.00	0.10	18	6.20		
1	4.58			19			
2	4.99			20			
3	4.95			21			
4	6.70			22			
5	7.07			23			
6	—			24			
7	7.20			25			
8	6.90			26			
9	5.60						<u>AFTER BAILED</u>
10	6.15						
11	7.25	6.80	0.45	11	7.02	7.00	0.02
12	6.55						
13	7.95	7.05	0.90	13	7.38	TRACE	
14	8.30			32			
15	8.22			33			
16	7.30			34			
17	6.40			35			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 610
Calverton, NY 11933
TEL: (516) 565-4900

action fuel calibration Spill # 84-004 Date 8-16-91 Time 1300
storage tank level 1.179.17 gal 2.001 Total gallons drained 2.001
pumping rate 0.001 gpm Total gallons pumped ----- Pressure ----- psi
cumulative total 1167.17 gal

Well #	DTW	OTP	Product	"	DTW	OTP	Product
1	8.52	8.3	.22	"	7.58		
2	6.7			"			
3	6.99			"			
4	6.36			"			
5	8.01			"			
6	8.33			"			
7	8.44			"			
8	8.15			"			
9	7.52			"			
10	7.56			"			
11	8.38	8.16	.22	AFTER DRAILING			
12	7.87			"	DTW	OTP	Product
13	9.4	8.23	1.17	11.	8.2		
14	9.55			12.	9.72	9.99	.03
15	9.5			13.W	8.45	8.35	.10
16	8.56						
17	7.76						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 8-9-91 Time 1030

Location: Grumman Caw. Fuel Cal Area

Spill # 84-0011

Storage tank level 177.17 gallons

Recovered to date 1165.17 gal.

Pump rate: ON gpm Tot.gal. pumped _____ Tot.gal.bailed .80 GAL

Air stripper blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet): Pool 1 _____ Pool 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

RW	<u>8.88</u>	<u>8.80</u>	<u>0.08</u>	18	<u>7.79</u>		
1	<u>7.60</u>			19			
2	<u>7.60</u>			20			
3	<u>6.56</u>			21			
4	<u>8.22</u>			22			
5	<u>8.55</u>			23			
6	<u>—</u>			24			
7	<u>8.65</u>			25			
8	<u>8.39</u>			26			
9	<u>7.90</u>			27			
10	<u>7.80</u>			28			
11	<u>8.37</u>	TRACE		29	<u>AFTER BAILED</u>		
12	<u>8.09</u>			30			
13	<u>9.40</u>	<u>8.40</u>	<u>1.00</u>	31	<u>8.76</u>	<u>8.72</u>	<u>0.04</u>
14	<u>9.76</u>			32			
15	<u>9.71</u>			33			
16	<u>8.75</u>			34			
17	<u>8.00</u>			35			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-31-91 Time 1030

Location: Geumman Crv. Fuel Cr Area Spill #: 84-0011

Storage tank level 76.37 gallons

Recovered to date 1164.37 gal.

Pump rate : DN gpm Tot.gal. pumped _____ Tot.gal.bailed 1.25

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well# DTW DTP Product # DTW DTP Product

RW	<u>8.51</u>	<u>8.42</u>	<u>0.09</u>	18	<u>7.67</u>		
1	<u>7.31</u>						
2	<u>7.46</u>						
3	<u>6.44</u>						
4	<u>8.08</u>						
5	<u>8.42</u>						
6	<u>—</u>						<u>AFTER BAILED</u>
7	<u>8.50</u>						
8	<u>8.25</u>						
9	<u>7.75</u>						
10	<u>7.65</u>						
11	<u>8.50</u>	<u>8.26</u>	<u>0.24</u>	11	<u>8.37</u>	<u>8.33</u>	<u>0.04</u>
12	<u>7.94</u>						
13	<u>9.42</u>	<u>8.31</u>	<u>1.11</u>	13	<u>8.83</u>	<u>8.79</u>	<u>0.04</u>
14	<u>9.62</u>						
15	<u>9.58</u>						
16	<u>8.62</u>						
17	<u>7.83</u>						



MPC ENVIRONMENTAL SERVICES
P.O.BOX 610 Calverton, NY 11933
Tel:(516)309-4400

Date 7-26-91 Time 10:30

Location: Grimmire - Fuel Calibration Spill # 84-0011

Storage tank level 175.12 gallons Recovered to date 1163.12 gal.

Pump rate: 001 gpm Tot.gal. pumped 799876 Tot.gal.bailed 0.12

Well# DTW DTP Product # DTW DTP Product

Well#	DTW	DTP	Product #	DTW	DTP	Product
1	8.35	8.32	.03			
1	6.83			11	8.15	after bailing Trade
2	7.34			23		
3	6.93			24		
4	7.99			25		
5	8.31			26		
6	—			27		
7	8.4			28		
8	8.13			29		
9	7.64			30		
10	7.54			31		
11	8.28	8.15	.19	32		
12	7.85			33		
13	8.63			34		
14	9.54			35		
15	9.48			36		
16	8.53			37		
17	7.72			38		
18	7.53			39		
19				40		
20				41		



MPC ENVIRONMENTAL SERVICES
c.o. box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-17-91 Time 1130

Location: Grumman Calverton Fuel depot Spill #: 82-1680

Storage tank level _____ gallons Recovered to date 110.37 gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed 0.02

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW	-			21	13.86		
1	17.03	17.01	.02	22	14.87		
2	15.96			23	15.65		
3	15.64			24	14.89		
4	18.13			25	15.42		
5	17.66			26	15.30		
6	15.87			27	12.50		
7	16.86			28	15.29		
8	15.4			29	15.09		
9	17.76	17.73	.03	30	15.12		
10	18.20			A	15.98		
11	17.96			B	16.08		
	17.95	17.93	.02	C	17.12		
13	15.23			D	12.92		
14	16.17						AFTER Bailing
15	15.51			1	12.04		
16	15.91			9	12.78		
17	15.78			12	17.97		
18	15.99						
19	14.72						
20	15.75						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 7-10-91 Time 1130

Location: GRUMMAN CAN. FUEL DEPOT AREA

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date 110.35 gal

Pump rate : _____ qpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW				21	14.25		
1	16.95			22	14.82		
2	15.70			23	15.57		
3	15.56			24	14.84		
4	17.95			25	15.30		
5	17.60			26	15.20		
6	16.75			27	12.40		
7	16.74			28	15.20		
8	DRY			29	14.95		
9	17.56	TEAC	E	30	15.05		
10	18.55			A	15.89		
11	17.80			B	15.99		
12	19.12			C	17.02		
13	15.15			D	17.85		
14	16.10			35			
15	15.40			36			
16	TRUCK.			37			
17	15.67			38			
18	15.89			39			
19	14.60			40			
20	15.64			41			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-27-91 Time 1000

Location: Fuel Depot

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date 110,35 gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW				21	13.95		
1	16.96			22	14.59		
2	15.44			23	15.3		
3	15.3			24	14.52		
4	17.67			25	15.02		
5	17.31			26	14.9		
6	16.51			27	12.11		
7	16.51			28	14.95		
8	DRY			29	14.66		
9	17.29			30	14.78		
10	18.3			A.	15.87		
11	17.54			B.	15.73	-	
12	18.84			C.	16.76	-	
13	Flooden			D.	17.52	-	
14	15.81			E.			
15	15.13			F.			
16	15.55			G.			
17	15.39			H.			
18	15.58			I.			
19	14.32			J.			
20	15.35			K.			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-21-91 / Time 1100

Location: Grumman Caw. Fuel Depot Area Spill # 82-1680

Storage tank level _____ gallons Recovered to date 110.35 gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed _____

Air Stripper Blower: ON/OFF _____ fpm _____ temp _____ battery _____

Soil Venting System: ON/OFF _____ fpm _____ temp _____ battery _____

Pool Levels (feet) : Pool 1 _____ Pool 2 _____

Well# DTW DTP Product # DTW DTP Product

RW							
1	16.51				15.47		
2	15.31				14.21		
3	15.18				15.25		
4	17.57				13.90		
5	17.20				14.40		
6	16.35				15.20		
7	16.34				14.40		
8	DRY				14.94		
9	17.19				14.80		
10	18.19				11.99		
11	17.41				14.81		
12	18.74				14.52		
13	18.74			A	14.70		
14	14.78			B	15.52		
15	15.70			C	15.60		
16	15.03			D	16.62		
17	15.41				17.94		
	15.27						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-14-91 Time 1100

Location: Fuel Depot

Spill # 82-1680

Storage tank level _____ gallons

Recovered to date 110.35 gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed 0

Well #	DTW	DTP	Product	#	DTW	DTP	Product
--------	-----	-----	---------	---	-----	-----	---------

KW					13.71		
1	16.63				14.3		
2	15.21				15.06		
3	15.06				14.3		
4	17.45				14.82		
5	17.07				14.7		
6	16.27				11.87		
7	16.27				14.71		
8	DRY				14.43		
9	17.09				14.56		
10	18.05			A	15.4		
11	17.3			B	15.5		
12	18.61			C	16.52		
13	14.64			D	17.3		
14	15.56						
15	14.89						
16	15.3						
17	16.16						
18	15.35						
19	14.1						
20	15.12						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 6-7-91 Time 1230

Location: Grumman Law. Fuel Depot Area

Spill # 82-1680

Storage tank level gallons

Recovered to date 110.35 gal:

Pump rate : gpm Tot.gal. pumped Tot.gal.bailed

Air Stripper Blower: ON/OFF fpm temp battery

Soil Venting System: ON/OFF fpm temp battery

Pool Levels (feet) : Pool 1 Pool 2

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				18	15.49		
1	16.40			19	14.00		
2	15.12			20	15.05		
3	15.00			21	13.65		
4	17.40			22	14.22		
5	17.00			23	15.03		
6	16.17			24	14.20		
7	16.16			25	14.72		
8	DRY			26	14.60		
9	17.00			27	11.80		
10	17.95			28	14.75		
11	17.22			29	14.35		
12	17.51			30	14.50		
13	14.59			A	15.31		
14	15.50			B	15.41		
15	14.80			C	16.44		
16	15.21			D	17.25		
17	15.30			35			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 634-4900

LOCATION: Luel Depot SPILL# 82-1680 DATE 5-30-91 TIME 1000
STORAGE TANK LEVEL 1. 110.356 2. 0
CUMULATIVE TOTAL 110.356 GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.2		
RW 2.				23	14.92		
RW 3.				24	14.16		
RW 4.				25	14.06		
PW 1				26	14.53		
PW 2				27	11.72		
IW				28	14.6		
				29	14.92		
1	16.33			30	14.41		
2	15.1				A. 15.26		
3	14.95				B. 15.36		
4	17.32				C. 16.4		
5	16.94				D. 17.15		
6	16.19			35			
7	16.19			36			
8	DRY			37			
9	16.95			38			
10	17.9			39			
11	17.15			40			
12	18.47			41			
13	14.59			42			
14	15.46			43			
15	14.78			44			
16	15.18			45			
17	15.			46			
18	15.8			47			
19	13.94			48			
20	14.98			49			
21	13.58			50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610 Calverton, NY 11933
Tel: (516) 369-4900

Date 5.24.91 Time 1315

Location: GRUMMAN CALVERTON FUEL DEPOT Spill # 82-1680

Storage tank level 0 gallons Recovered to date 110.35 gal.

Pump rate : _____ gpm Tot.gal. pumped _____ Tot.gal.bailed 0

Well#	DTW	DTP	Product	#	DTW	DTP	Product
-------	-----	-----	---------	---	-----	-----	---------

KW				21	13.50		
1	16.22			22	14.10		
2	15.00			23	14.85		
3	14.89			24	14.06		
4	17.25			25	14.60		
5	16.85			26	14.44		
6	16.02			27	11.62		
7	16.00			28	14.49		
8	DRY			29	14.20		
9	16.90			30	14.35		
10	17.81			A	15.16		
11	17.07			B	15.25		
12	18.39			C	16.30		
13	14.45			D	17.11		
14	15.37			35			
15	14.70			36			
16	15.10			37			
17	14.95			38			
18	15.12			39			
19	13.89			40			
20	14.90			41			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fuel Depot SPILL# 82-1680 DATE 5-17-91 TIME 1000
STORAGE TANK LEVEL 1. 2.
CUMULATIVE TOTAL 110.35G GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	13.96		
RW 2.				23	14.71		
RW 3.				24	19.93		
RW 4.				25	14.46		
PW 1				26	14.91		
PW 2				27	11.5		
IW				28	14.35		
				29	14.08		
1	16.1			30	14.21		
2	14.86				F 15.03		
3	14.7				A 15.13		
4	17.11				C 16.16		
5	16.72				D 16.92		
6	15.91			35			
7	15.91			36			
8	DRY			37			
9	16.72			38			
10	17.69			39			
11	16.93			40			
12	18.24			41			
13	14.32			42			
14	14.93			43			
15	14.55			44			
16	14.94			45			
17	14.8			46			
18	14.98			47			
19	13.72			48			
20	14.76			49			
21	13.95			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-1900LOCATION: Crucian Colletta's Fuel DepotSPILL # 82-1680DATE 5-10-91TIME 1130

STORAGE TANK LEVEL 1.

2.

CUMULATIVE TOTAL 10.35 G.GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			22	Flooded		
RW 2.	-			23	14.56		
RW 3.	-			24	13.77		
RW 4.	-			25	Flooded		
PW 1	-			26	14.16		
PW 2	-			27	11.33		
IW	-			28	14.21		
	-			29	13.95		
1	15.94			30	14.05		
2	14.72				A 14.68		
3	14.36				B 14.98		
4	17.00				C 16.00		
5	16.56				D 16.78		
6	15.75			35			
7	15.25			36			
8	Dry			37			
9	16.57			38			
10	17.53			39			
11	16.77			40			
12	18.08			41			
13	13.78			42			
14	15.09			43			
15	14.38			44			
16	14.79			45			
17	14.63			46			
18	14.83			47			
19	13.57			48			
20	13.18			49			
21	14.60			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: GRUMMAN CALV. FUEL DEPOT SPILLS 82-1680 DATE 5.3.91 TIME 130 C

STORAGE TANK LEVEL 1.

2.

CUMULATIVE TOTAL 110.35 GAL.GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	TRUCK		
RW 2.				23	14.50		
RW 3.				24	13.72		
RW 4.				25	14.25		
PW 1				26	14.06		
PW 2				27	11.25		
IW				28	14.15		
				29	14.00		
1	15.85			30	13.89		
2	14.65			A	14.80		
3	14.50			B	14.90		
4	16.90			C	15.90		
5	16.50			D	16.70		
6	15.65			35			
7	15.67			36			
8	DRY			37			
9	16.50			38			
10	17.45			39			
11	16.70			40			
12	18.00			41			
13	FLOODED			42			
14	15.03			43			
15	14.30			44			
16	14.70			45			
17	14.60			46			
18	14.75			47			
19	13.47			48			
20	14.50			49			
21	18.10			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Fuel Depot SPILL # 89-1680 DATE 4-26-91 TIME 1100
STORAGE TANK LEVEL 1. 2.
CUMULATIVE TOTAL 110.35 GAL. GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	13.81		
RW 2.				23	14.6		
RW 3.				24	19.81		
IW 4.				25	14.34		
PW 1				26	14.17		
PW 2				27	11.34		
IW				28	14.24		
				29	14.18		
1	15.98			30	14.09		
2	14.75				A 14.91		
3	15.09				B 14.99		
4	17				C 16.02		
5	16.6				D 16.77		
6	15.78			35			
7	15.78			36			
8	DRY			37			
9	16.6			38			
10	17.54			39			
11	16.78			40			
12	18.08			41			
13	14.16			42			
14	15.12			43			
15	14.4			44			
16	14.79			45			
17	14.66			46			
18	14.82			47			
19	14.57			48			
20	14.6			49			
21	13.19			50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Groundwater Fuel Depot Spill Date 4/19/91 Time 1030
82-1680

Storage tank level _____ gal Cumulative total 110.35G Total gallons bailed 0

Pumping rate _____ gpm Total gallons pumped _____ Pressure _____ psi

Air Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

Soil Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

Pool Levels 1 ----- 2 -----

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				10	15.33		
1	16.48			19	14.06		
2	15.25			20	15.08		
3	15.08			21	13.71		
4	17.48			22	14.36		
5	17.08			23	15.08		
6	16.25			24	14.29		
7	16.26			25	14.80		
8	DRY			26	14.67		
9	17.09			27	11.84		
10	18.04			28	14.72		
11	17.29			29	14.58		
12	18.58			30	14.46		
13	14.68			A	15.12		
14	15.62			B	15.50		
15	14.92			C	16.51		
16	15.32			D	17.31		
17	15.17						



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

Location Brennan Oil Fuel Depot Area Spill # 821180 Date 4/18/91 Time 1100

Storage tank level _____ gal Cumulative total 110.35 Total gallons bailed 0

Pumping rate _____ gpm Total gallons pumped _____ Pressure _____ psi

Var Stripper Blower ON/OFF _____ Temp _____ fpm _____ Battery _____

Var Venting System ON/OFF _____ Temp _____ fpm _____ Battery _____

Pool Levels 1 _____ 2 _____

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW				18	15.30		
1	16.45			19	14.00		
2	15.20			20	15.05		
3	15.06			21	13.65		
4	17.45			22	14.26		
5	17.06			23	15.05		
6	16.23			24	14.27		
7	16.22			25	14.80		
8	DRY			26	14.65		
9	17.06			27	11.81		
10	17.99			28	14.75		
11	17.23			29	14.45		
12	18.55			30	14.58		
13	14.67						
14	15.60			A	15.40		
15	14.89			B	15.46		
16	15.25			C	16.50		
7	15.10			D	17.25		



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11925
Tel: (516) 369-4900

Location Central Calvert Field Spill # 82-1630 Date 4-5-91 Time 1200
Storage tank level 1. 0 gal 2. 0 gal Total gallons bailed 0 gal
Pumping rate 0 GPM Total gallons pumped 0 Pressure 0 psi
Cumulative total 110.35 gal

Well#	DTW	DTP	Product	#	DTW	DTP	Product
RW	-						
1	16.31			10	15.14		
2	15.07			19	13.88		
3	14.93			20	14.90		
4	17.31			21	13.51		
5	16.90			22	14.14		
6	16.09			23	14.89		
7	16.11			24	14.11		
8	Org			25	14.63		
9	16.92			26	14.47		
10	17.84			27	11.63		
11	17.29			28	14.56		
12	18.39						
13	14.50			H	15.72		
14	15.44			I	15.30		
15	14.77			C	16.33		
16	15.11			O	17.13		
17	14.96						



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Fuel DepotSPILLS 82-1680DATE 3-27-91TIME 1100

STORAGE TANK LEVEL 1.

2.

CUMULATIVE TOTAL 110.35 GAL.GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.07		
RW 2.				23	14.81		
RW 3.				24	14.01		
RW 4.				25	14.55		
PW 1				26	14.39		
PW 2				27	14.55		
IW				28	14.48		
				29	14.21		
1	16.22			30	14.36		
2	14.98			31	A. 15.12		
3	14.89			32	B. 15.21		
4	17.22			33	C. 16.24		
5	16.81			34	D. 16.98		
6	16.			35			
7	16.01			36			
8	DRY.			37			
9	16.83			38			
10	17.74			39			
11	17.			40			
12	18.29			41			
13	14.43			42			
14	15.35			43			
15	14.63			44			
16	15.01			45			
17	14.86			46			
18	15.01			47			
19	13.79			48			
20	14.81			49			
21	13.4			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Fuel Depot SPILL # 82-1680 DATE 3-22-91 TIME 1130STORAGE TANK LEVEL 1. 2.CUMULATIVE TOTAL 110.35 GALGALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.08		
RW 2.				23	14.8		
RW 3.				24	14.02		
RW 4.				25	14.52		
PW 1				26	14.38		
PW 2				27	11.53		
IW				28	14.47		
				29	14.2		
1	16.21			30	14.33		
2	15			31	15.11		
3	14.82			32	15.2		
4	17.21			33	C 16.24		
5	16.81			34	D 16.97		
6	16.01			35			
7	16.			36			
8	DRY.			37			
9	16.83			38			
10	17.75			39			
11	16.96			40			
12	18.3			41			
13	14.37			42			
14	15.35			43			
15	14.62			44			
16	15.			45			
17	14.84			46			
18	15.01			47			
19	13.76			48			
20	14.8			49			
21	19.39			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grumman Car. Fuel Depot SPILL # 82-1680 DATE 3/15/91 TIME 1115
DRAKE TANK LEVEL 1. 110.35 GAL. 2. _____
CUMULATIVE TOTAL 110.35 GAL. GALLONS BAILED 0

VELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.12		
RW 2.				23	14.85		
HW 3.				24	TRUCK		
RW 4.				25	12.30 (Flooded)		
PW 1				26	14.40		
PW 2				27	11.55		
IW				28	13.86		
				29	14.25		
1.	Flooded			30	Flooded		
	15.00			A	15.10		
3	14.85			B	15.23		
4	17.25			C	16.25		
5	16.85			D	17.05		
6	16.00			25			
7	16.63			36			
8	DRY			37			
9	16.82			38			
10	17.75			39			
11	16.99			40			
12	18.30			41			
13	Flooded			42			
14	15.39			43			
15	14.65			44			
16	15.06			45			
17	14.90			46			
18	15.09			47			
19	13.07			48			
20	14.80			49			
21	13.40			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 634-4960LOCATION: Grumman Cal U Fuel DepotSPILL # 82-1180DATE 3/8/91 TIME 1030

ORAGE TANK LEVEL 1

2.

CUMULATIVE TOTAL 110.35 GALGALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	141.20		
RW 2.				23	14.91		
HW 3.				24	14.12		
IW 4.				25	14.67		
W 1				26	14.47		
PW 2				27	11.64		
IW				28	14.59		
				29	14.30		
1.	16.30			30	14.45		
2.	15.07			31	15.21		
3.	TRUCKS			32	15.31		
4.	17.30			33	16.35		
5.	16.90			34	17.10		
6.	16.07			35			
7.	16.07			36			
8.	DRY			37			
9.	16.90			38			
10.	17.85			39			
11.	17.07			40			
12.	18.40			41			
13.	14.50			42			
14.	15.47			43			
15.	14.75			44			
16.	15.11			45			
17.	14.97			46			
18.	15.14			47			
19.	13.90			48			
20.	14.90			49			
21.	13.50			50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

LOCATION: Calverton Fuel depot

SPILLS 82-1680

DATE 2-21-91

TIME 1000

STORAGE TANK LEVEL 1

2

CUMULATIVE TOTAL

110.35 GAL.

GALLONS BAILED

0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.50		
RW 2.				23	15.23		
RW 3.				24	14.45		
RW 4.				25	14.98		
PW 1				26	14.80		
PW 2				27	12.00		
IW				28	14.90		
				29	14.76		
1.	16.65			30	14.62		
2	15.42			A	15.57		
3	15.27			B	15.66		
4	17.64			C	16.70		
5	17.25			D	17.42		
6	16.45			35			
7	16.46			36			
8	DRY			37			
9	17.26			38			
10	18.20			39			
11	17.45			40			
12	18.75			41			
13	14.80			42			
14	15.70			43			
15	15.08			44			
16	15.47			45			
17	15.31			46			
18	15.50			47			
19	14.23			48			
20	15.26			49			
21	13.86			50			



MPC ENVIRONMENTAL SERVICES
P.O. Box 610
Calverton, NY 11933
Tel: (516) 369-4900

82-1680

LOCATION: Calverton Fuel Depot

DATE 3/28/91

TIME 1300

STORAGE TANK LEVEL 1.

2.

3.

4.

CUMULATIVE TOTAL 110.35 GAL.

PUMPING RATE RW1

RW3

RW4

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
A	15.67			24.	14.58		
B	15.77			25.	15.08		
C	16.81			26.	14.94		
D	17.54			27.	12.10		
1.	16.77			28.	15.00		
2.	15.50			29.	14.73		
3.	15.37			30.	14.85		
4.	17.75			31.			
5.	17.35			32.			
6.	16.54			33.			
7.	16.54			34.			
8.	DRY			35.			
9.	17.37			36.			
10.	18.33			37.			
11.	17.58			38.			
12.	18.88			39.			
13.	14.98			40.			
14.	15.88			41.			
15.	15.19			42.			
16.	15.56			43.			
17.	15.42			44.			
18.	15.62			45.			
19.	14.35			46.			
20.	15.37			47.			
21.	13.98			48.			
22.	14.60			49.			
23.	15.35			50.			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: CALVERTON FUEL DEPOT SPILL # 82-1680 DATE 2/14/91 TIME 1030

STORAGE TANK LEVEL 1 _____ 2 _____

CUMULATIVE TOTAL 110.35 GAL.GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
A	15.42			22	14.33		
B	15.52			23	15.08		
C	16.56			24	14.31		
D	17.29			25	Flooded		
PW 1				26	CAR		
PW 2				27	11.85		
IW				28	14.75		
				29	14.46		
1	16.50			30	14.62		
2	15.27			31			
3	15.13			32			
4	17.50			33			
5	17.10			34			
6	16.39			35			
7	16.29			36			
8	DRY			37			
9	17.13			38			
10	18.08			39			
11	17.31			40			
12	18.62			41			
13	19.67			42			
14	15.62			43			
15	Flooded			44			
16	16.33			45			
17	15.17			46			
18	15.32			47			
19	14.08			48			
20	15.10			49			
21	13.71			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Grimman Caly. Fuel Depot Acc SPILLS 821680DATE 2/8/91TIME 1130

STORAGE TANK LEVEL 1

2.

CUMULATIVE TOTAL

110.35 GAL.

GALLONS BAILED

0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.30		
RW 2.				23	15.07		
RW 3.				24	14.30		
RW 4.				25	14.85		
PW 1				26	14.65		
PW 2				27	11.81		
IW				28	14.75		
				29	14.62		
1	16.50			30	14.47		
2	15.29				A 15.40		
3	15.10				B 15.50		
4	17.50				C 16.50		
5	17.10				D 17.30		
6	16.25			35			
7	16.34			36			
8	DRY			37			
9	17.10			38			
10	18.01			39			
11	17.25			40			
12	18.58			41			
13	14.70			42			
14	15.67			43			
15	TRUCK			44			
16	15.30			45			
17	15.13			46			
18	15.34			47			
19	14.06			48			
20	15.10			49			
21	13.68			50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Grimm Colverta Fuel depot SPILL # 82-1680 DATE 1-31-91 TIME 1130

STORAGE TANK LEVEL 1 _____

2 _____

CUMULATIVE TOTAL

110.35 GAL.

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			22	14.15		
RW 2.	-			23	14.88		
RW 3.	-			24	14.10		
RW 4.	-			25	14.62		
PW 1	-			26	14.44		
PW 2	-			27	11.61		
IW	-			28	14.56		
	-				A 1521		
1	16.30				B 1529		
2	15.09				C 16.32		
3	14.94				D 17.04		
4	17.31			33			
5	16.89			34			
6	16.08			35			
7	16.09			36			
8	014			37			
9	16.91			38			
10	12.80			39			
11	17.06			40			
12	18.36			41			
13	14.52			42			
14	15.44			43			
15	14.73			44			
16	15.10			45			
17	14.94			46			
18	15.14			47			
19	13.84			48			
20	14.90			49			
21	13.48			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Cahueton Fuel Depot SPILL# 82-1680 DATE 1/24/91 TIME 1000

STORAGE TANK LEVEL 1 _____ 2. _____

CUMULATIVE TOTAL 110.35 GAL.GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
A	15.08			22	14.04		
B	15.17			23	14.77		
C	16.19			24	13.98		
D	16.85			25	14.50		
PW 1				26	13.29		
PW 2				27	11.49		
IW				28	14.46		
				29			
1	16.19			30			
2	14.96			31			
3	14.83			32			
4	17.19			33			
5	16.77			34			
6	16.94			35			
7	15.94			36			
8	DRY			37			
9	16.79			38			
10	17.64			39			
11	16.88			40			
12	18.21			41			
13	14.39			42			
14	15.33			43			
15	14.56			44			
16	14.94			45			
17	14.79			46			
18	14.96			47			
19	13.67			48			
20	14.69			49			
21	13.29			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Grumman GLV Fuel Depot SPILL# 821680 DATE 1/16/91 TIME 100

STORAGE TANK LEVEL 1 _____ 2 _____

CUMULATIVE TOTAL _____

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.32		
RW 2.				23	15.04		
RW 3.				24	14.22		
RW 4.				25	TRUNC		
PW 1				26	15.57		
PW 2				27	11.70		
IW				28	13.20		
				A	15.20		
1	16.40			B	15.40		
2	15.25			C	16.45		
3	15.07			D	17.15		
4	17.45			33			
5	17.02			34			
6	16.20			35			
7	16.19			36			
8	DRY			37			
9	17.05			38			
10	17.90			39			
11	17.15			40			
12	18.45			41			
13	ICE			42			
14	15.58			43			
15	14.80			44			
16	—			45			
17	15.07			46			
18	15.20			47			
19	13.95			48			
20	14.95			49			
21	13.56			50			



MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900

LOCATION: Cahertown Fuel Depot SPILL # 82-1680 DATE 1/991 TIME 10:31

STORAGE TANK LEVEL 1 _____ 2. _____

CUMULATIVE TOTAL 110.35 GAL.

GALLONS BAILED 0

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
A	Flooded			22	Flooded		
B	Flooded			23	15.33		
C	16.79			24	14.54		
D	17.50			25	DRY		
PW 1				26	14.88		
PW 2				27	12.04		
IW				28	Flooded		
				29			
1	16.73			30			
2	15.50			31			
3	15.37			32			
4	17.77			33			
5	17.37			34			
6	16.50			35			
7	16.50			36			
8	DRY			37			
9	17.37			38			
10	18.35			39			
11	17.50			40			
12	18.83			41			
13	Flooded			42			
14	15.88			43			
15	Flooded			44			
16	15.54			45			
17	15.37			46			
18	15.54			47			
19	14.35			48			
20	15.29			49			
21	15.83			50			



MPC ENVIRONMENTAL SERVICES

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772
(516) 654-4900LOCATION: Calverton - Fuel Depot SPILL # 82-1680 DATE 1-2-90 TIME 1030

STORAGE TANK LEVEL 1.

2.

CUMULATIVE TOTAL

110.356

GALLONS BAILED

0.00

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				22	14.56		
RW 2.				23	15.9		
RW 3.				24	14.5		
RW 4.				25	15.01		
PW 1				26	14.83		
PW 2				27	11.98		
IW				28	14.97		
				29	15.6		
1	16.67			30	B. 15.68		
2	15.46			31	C. 16.72		
3	Truck			32	D. 17.41		
4	17.7			33			
5	17.27	Traco		34			
6	16.47			35			
7	16.47			36			
8	DRY			37			
9	17.31			38			
10	18.18			39			
11	17.42			40			
12	18.74			41			
13	14.9			42			
14	15.84			43			
15	15.1			44			
16	15.46			45			
17	15.32			46			
18	15.49			47			
19	14.21			48			
20	15.24			49			
21	19.83			50			

W13

SAMPLE/CORE LOG

Boring/Well P1 Project/No. 82-1680 Page of

Site Location Grumman CALVECTON Fuel depot Drilling Started 5/11/89 Drilling Completed 5/11/89

Total Depth Drilled feet Hole Diameter inches Type of Sample/
Coring Device BURER RETURN

**Length and Diameter
of Coring Device** **Sampling Interval** **feet**

Land-Surface Elev. feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ **Drilling Method** RIGGE

Drilling Contractor MPC **Driller** _____ **Helper** _____

Prepared By Charlie Sosik Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface)		Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
From	To			
0	2			Topsoil, brown silty sand no odor
2	5			Ct. brown fine - med sand poorly sorted 10% gravel no odor.
5	10			tan med sand poorly sorted no odor
10	15			Ct. tan med sand small to coarse poorly sorted no odor
15	20			Ct. tan med sand slight odor * PI = 1.0 atm
22	25			Grey tan med sand strong odor * PI = 150-162
25	30			Grey tan med sand strong odor * PI = 120-170
				CASING
				4" PUC w/ locking cap + 12" min hole
				20' .020 screen
				10' blank

W 14

SAMPLE/CORE LOG

Boring/Well P-2 Project/No. 82-1680 Page ____ of ____

Site Location Catuzetan Fuel Depot Drilling Started 5/11/89 Drilling Completed 5/11/89

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device Auger ReturnLength and Diameter
of Coring Device _____ Sampling Interval _____ feetLand-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger

Drilling Contractor MPC Driller _____ Helper _____

Prepared By Charlie Sosik Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface)	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
From	To		
0	2		Topsoil brown silty sand
2	5		TAN MED SAND w/ A FEW pebbles
			No odor
5	20		1t. tan med sand fairly well sorted
		*	no odor slight odor 15-20
			PI down
20	25		* strong odor @ 22' very strong @ 25'
			SAND GREY IN COLOR BECOMING DARKER
			as depth ≈ 150 ppm
25	30		* grey med sand strong odor
			sample taken ..
			CASING
			4" PVC w/ 12" manhole + locking cap
			20' .070 SCREEN
			10' BLANK
			676

WIS

SAMPLE/CORE LOG

Boring/Well P3 Project/No. 82-1680 Page _____ of _____
Gullane

Site Location Grumman Calculators Fuel Depot Drilling Started 5/11/89 Drilling Completed 5/11/89

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device _____ Auger return

Total Depth Drilled _____ feet Hole Diameter _____
Length and Diameter
of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger

Drilling Contractor MPC Driller Don Klaus Helper SCOTT
HANSON

Prepared By Charlie Sosik Hammer Weight _____ Hammer Drop _____ inches

W16

SAMPLE/CORE LOG

Boring/Well P-4 Project/No. 82-1680 Page _____ of _____Site Location Grumman Catferton Fuel depot Drilling Started 5/11/89 Drilling Completed 5/11/89Total Depth Drilled 30' feet Hole Diameter _____ inches Type of Sampled Coring Device Auger Return / split spoon

Length and Diameter of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____Drilling Fluid Used _____ Drilling Method AugerDrilling Contractor MPC Driller Don Klaus Helper ScottPrepared By Charlie Sasik Hammer Weight _____ Hammer Drop _____ inches

Froin	To	Core Recovery (%)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2'			Topsoil, med grain sand w/ small % gravel no odor
2	5			TAN MED grain sand Fairly well sorted sub-rounded no odor
5	15			Ct. tan med grain sand, well sorted no odor
				Core Rec
15	17			Ct tan MED sand well sorted no odor
20	22			TAN COARSE - MED sand, poorly sorted 10% pebbles sample sat. no odor
25	27			MED - COARSE sand poorly sorted no odor sample sat.
30	32			SAME AS previous
				CASING
				4" PUC CASING w/ locking cap
				12" manhole
				20' .020 screen
				10' 678 blank

w17

SAMPLE/CORE LOG

Boring/Well P-5 Project No. 82-168C Page of

Site Location Orlweeton Fuel depot, Newmarket Drilling Started 5/12/89 Drilling Completed 5/12/89

Total Depth Drilled _____ feet Hole Diameter: _____ inches Type of Sample/
Coring Device Auger cutters

**Length and Diameter
of Coring Device** _____ **Sampling Interval** _____

Land Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Angele

Drilling Contractor MPC Driller Don Klaus Helper Scott

Prepared By charlie sasik Hammer Weight _____ Hammer Drop _____ inc

WIB

SAMPLE/CORE LOG

Boring/Well P6 Project/No. 82-1680 Page of

Site Location Grumman Calverton Fuel Depot Drilling Started 5/12/89 Drilling Completed 5/12/89

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device Avgcc Return

**Length and Diameter
of Coring Device** _____ **Sampling Interval** _____ feet

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger

Drilling Contractor MPC Driller Don Kies Helper Scott

Prepared By Charlie Sosik Hammer Weight _____ Hammer Drop _____ inches

w/9

SAMPLE/CORE LOG

Boring/Well P-7 Project/No. 82-1680 Page 1 of 1

Site Location Gruuman Calverton Fuel Depot Drilling Started 5/12/89 Drilling Completed 5/12/89

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device AUGER RETURN

Length and Diameter _____ **Sampling Interval** _____
of Coring Device

Land-Surface Elevation _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method H.S. Auger

Drilling Contractor mpc Driller Don Klaus Helper scott

Prepared By Charlie Sosik Hammer Weight _____ Hammer Drop _____ inc

Sample/Cure Depth (feet below liquid surface)		Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
From	To			
0	7			topsoil, brown med sand
7	5			1 st Brown smec sand, fairly well sorted no odor
5	10			TAN MED SAND well sorted sub-rounded no odor
10	15			1 st tan med sand. well sorted, rounded, no odor
15	20			SAME AS PREVIOUS NO ODOR
20	30			SAME AS PREVIOUS VERY FAINT ODOR .7-.5 T.P II @ 25' odor fainter w/ depth
				CASING
				4" PUC 12" mh w/ locking cap
				20' .020 SCREEN
				10' Blank
				681

WZD

SAMPLE/CORE LOG

Boring/Well PB Project/No. 82-1680

Page _____ of _____

Site Location Crummian Calcareous Fuel deposit Drilling Started 5/12/89 Drilling Completed 5/12/89

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device Auger Return
Length and Diameter
of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet **Surveyed** **Estimated** **Datum** _____

Drilling Fluid Used _____ Drilling Method Angee

Drilling
2000 ft. 2000 ft. 2000 ft. 2000 ft.

Prepared By Charlie Sosik Hammer Weight _____ Drop _____ inches

W21

SAMPLE/CORE LOG

Boring/Well P-9 Project No. 82-1680 BRUNMAN Page of

Site Location Calvertton Fuel depot Drilling Started 5/12/87 Drilling Completed 5/12/87

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/
Coring Device _____ Auger return

Length and Diameter
of Coring Device _____ Sampling Interval _____

Land-Surface Elev. _____ feet Surveyed Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Auger

Drilling Contractor mpc Driller Don Klaus Helper Scott

Prepared By Charlie Sasik Hammer Weight _____ Hammer Drop _____ inc

APPENDIX D
SELECTED WATER SUPPLY DATA

6B4